

**KGUARD**  
SECURITY

# DVR

## USER MANUAL

KG-SHA104  
KG-SHA108



# CONTENTS

<b>SAFETY INSTRUCTIONS .....</b>	<b>1</b>
<b>CHAPTER 1. DVR FEATURES .....</b>	<b>2</b>
<b>CHAPTER 2. LAYOUTT .....</b>	<b>3</b>
2.1. FRONT PANEL .....	3
2.1.1. 4-CH Front Panel .....	3
2.1.2. 8-CH Front Panel .....	4
2.2. REAR PANEL .....	5
2.3. REMOTE CONTROL .....	6
<b>CHAPTER 3. DVR INSTALLATION.....</b>	<b>7</b>
3.1. HARD DRIVE INSTALLATION .....	7
3.2. CAMERA AND MONITOR CONNECTION.....	8
3.3. POWER SUPPLY CONNECTION.....	8
<b>CHAPTER 4. DVR BOOT UP OUT.....</b>	<b>9</b>
4.1. SYSTEM INITIALIZATION .....	9
4.2. MAIN INTERFACE.....	9
<b>CHAPTER 5. DVR MENU .....</b>	<b>10</b>
5.1. MAIN MENU PREVIEW.....	10
5.2. MAIN MENU .....	11
5.2.1. Camera Setup .....	11
5.2.1.1. Color Setup.....	11
5.2.1.2. Privacy Zone Setup .....	12
5.2.1.3. Autoseq Setup.....	12
5.2.2. Record Setup .....	13
5.2.2.1. Record Mode .....	13
5.2.2.2. Record Schedule Setup.....	13
5.2.2.3. Manual Recording .....	14
5.2.3. Recording Search & Playback .....	14
5.2.3.1. Search .....	14
5.2.3.2. Playback Interface .....	15
5.2.3.3. Video Backup .....	15
5.2.4. Device Management .....	16
5.2.4.1. HDD Management .....	16
5.2.4.2. Alarm Setup .....	17
5.2.4.3. Motion Detection Setup.....	19
5.2.4.4. PTZ Setup .....	19
5.2.4.5. PTZ Control .....	19
5.2.5. System Setup .....	20
5.2.5.1. Time Setup.....	20
5.2.5.2. Password.....	21

5.2.5.3. Video Setup .....	22
5.2.5.4. Language .....	22
5.2.5.5. Info .....	22
5.2.5.6. System Maintenance.....	22
5.2.6. Network Setup .....	23
5.2.6.1. Intranet/LAN Access Setup.....	23
5.2.6.2. Internet Access Setup .....	24
5.2.6.3. Ports.....	25
<b>CHAPTER 6. NETWORK ACCESS .....</b>	<b>26</b>
6.1. IE & NETVIEWER ACCESS .....	26
6.1.1. IE Setup.....	26
6.1.2. Connect to DVR.....	27
6.1.2.1 IE Plug-in & Netviewer Interface .....	27
6.1.3. Control Network Access .....	28
6.1.3.1 Live.....	28
6.1.3.2. Setup.....	28
6.1.3.3. Replay.....	28
6.1.3.4. Convert 264 file to AVI file.....	28
6.1.3.5. Remote Backup .....	29
6.1.3.6. PTZ Control.....	29
6.1.3.7. Logout .....	29
6.1.3.8. Playback Local File with Netviewer .....	30
6.2. MOBILE PHONES ACCESS.....	31
6.2.1. Mobile Setup.....	31
6.2.1.1. Install & Operate Mobile Client in Windows® Mobile Phones.....	31
6.2.1.2. Install & Operate Mobile Client in Symbian® Phones .....	33
6.2.1.3. Install & Operate Mobile Client in iPhone® .....	35
6.2.1.4. Blackberry Handheld Application Installation Guide .....	41
<b>CHAPTER 7. SPECIFICATIONS .....</b>	<b>44</b>
<b>CHAPTER 8. SYSTEM CONNECTION CONFIGURATION .....</b>	<b>45</b>
<b>CHAPTER 9. APPENDIX .....</b>	<b>47</b>
9.1 OPERATION FUNCTION TABLE.....	47
9.2. RECORDING ALARM SETTING .....	48
9.3. TROUBLESHOOTING .....	48
9.4. EMAIL SERVER CHECK LIST ( THE BELOW INFO ONLY FOR YOUR REF. ) .....	49
9.5. USAGE MAINTENANCE .....	49
9.6. USB DEVICE SUPPORT LIST.....	49
9.7. HDD DEVICE SUPPORT LIST.....	50
9.8. 3G CELL PHONE SUPPORT LIST .....	51

## Safety Instructions

### 1. Use proper power source.

Do not use this product with a power source that applies more than specified voltage (100-240V AC).

### 2. Never insert anything metallic into the DVR case.

Putting something into the DVR case can be a source of dangerous electric shock.

### 3. Do not operate in wet & dusty area or use near water.

Avoid places like a damp basement or dusty hallway.

### 4. Do not expose this product to rain or use near water.

If this product accidentally gets wet, unplug it and contact an authorized dealer immediately.

### 5. Keep product surfaces clean and dry.

To clean the outside case of the DVR, use a cloth lightly dampened with water (no solvents).

### 6. Do not attempt to remove the top cover.

If there are any unusual sounds or smells coming from the DVR, unplug it immediately and contact an authorized dealer or service center.

### 7. Do not attempt to remove the top cover.

Warning: You may be subjected to severe electrical shock if you remove the cover of the DVR.

### 8. Handle DVR box carefully.

If you accidentally drop your DVR on any hard surface, it may cause a malfunction. If the DVR doesn't work properly due to physical damage, contact an authorized dealer for repair or exchange.

### 9. Use standard lithium cell battery. (NOTE: Manufacturer has preinstalled battery.)

The standard lithium cell 3v battery located on the mother board should be replaced if the time clock does not hold its time after the power is turned off. Warning: unplug the DVR before replacing battery or you may be subjected to severe electrical shock. Properly dispose of old batteries.

### 10. Make sure there is good air circulation around the unit.

This DVR system uses a hard drive for video storage, which generates heat during operation. Do not block air holes (bottom, upper, sides and back) of the DVR that cool down the system while running. Install or place this product in an area where there is good air circulation.

## Chapter 1. DVR Features

Real time monitoring	Supports real time surveillance via Monitor
Save Recordings	DVR saves real-time recording image to HDD
Backup Recordings	Supports DVR backup via USB flash drive and hard drive.
Playback Recordings	Supports DVR single CH and multiple CH playback of recorded files
Network operation	Supports remote surveillance by multiple users simultaneously
Alarm Setting	Supports HDD & video input alarm management
Mouse Operation	Supports Mouse operation for faster menu navigation.
PTZ Control	Supports PTZ camera operations through RS-485.

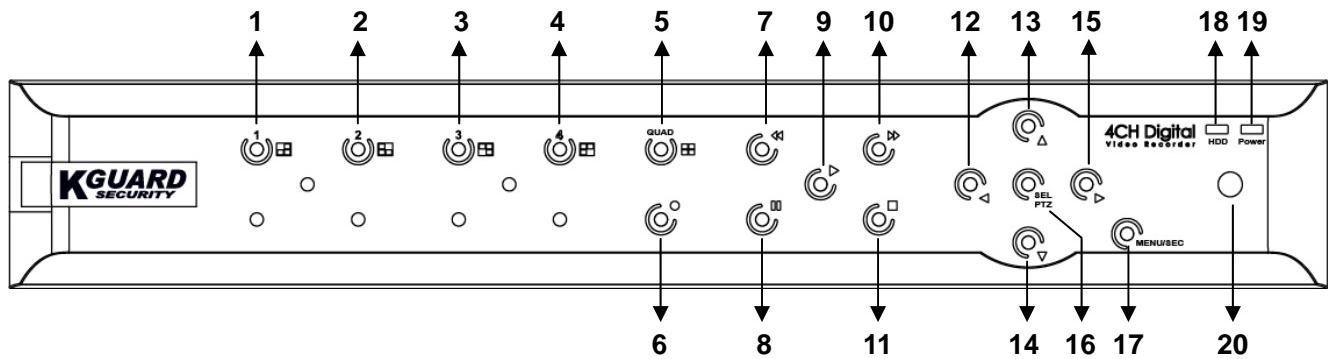
### Other Features:

- H.264 real-time high compression and supports dual stream network transmission
- Graphics & Windows OSD interface
- ADPCM audio compression
- Supports pentaplex operation: live view, record, playback, backup and network transmission
- Supports backup & upgrade with USB flash disk
- Supports DDNS
- Supports audio transmission via network
- Selectable packing time for recorded files
- Supports editing camera title
- Supports adjusting image color
- Event camera pop-up function
- Supports remote view with mobile phones based on Symbian S60 3<sup>rd</sup>/5<sup>th</sup> edition, Windows Mobile, iPhone & Blackberry
- Supports VGA output (max. resolution: 1920 x 1200)
- Alarm modes: video loss, HDD full, HDD loss ,Motion detection,
- Email alert function
- With free-drag digital zoom function for live viewing
- Multiple languages OSD
- Supports auto maintenance

## Chapter 2. Layout

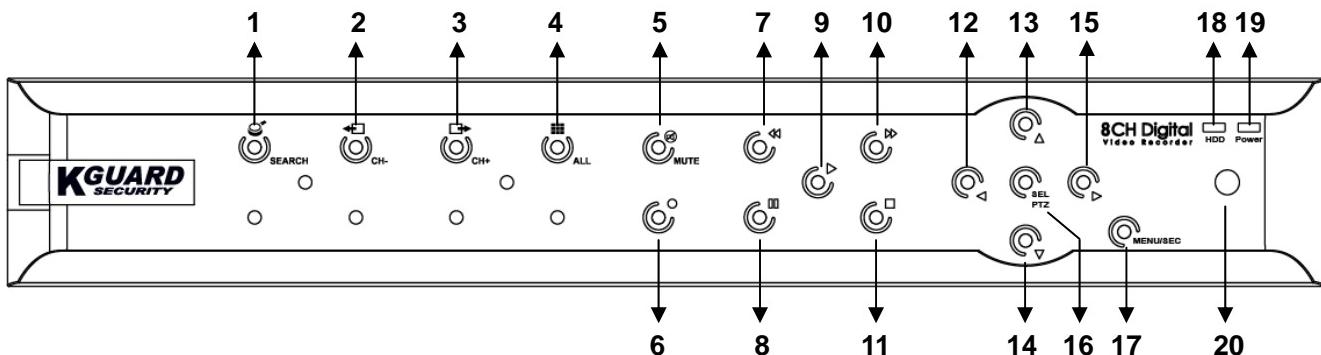
### 2.1. Front Panel

#### 2.1.1. 4-CH Front Panel



Item	Key/Indicator	Marks	Functions
1	<b>CH1</b>		Select Channel 1 to be full screen displayed
2	<b>CH2</b>		Select Channel 2 to be full screen displayed
3	<b>CH3</b>		Select Channel 3 to be full screen displayed
4	<b>CH4</b>		Select Channel 4 to be full screen displayed
5	<b>QUAD</b>		Select quad display
6	<b>REC</b>		Start manual recording
7	<b>REW</b>		Move leftward / Rewind
8	<b>PAUSE</b>		Pause / play frame by frame
9	<b>PLAY</b>		Enter into playback mode / Play button
10	<b>FWD</b>		Move rightward / Play forward
11	<b>STOP</b>		Stop Playback / stop manual recording
12	<b>LEFT</b>		Enter into main menu or exit menu
13	<b>UP</b>		Move Up
14	<b>DOWN</b>		Move Down
15	<b>RIGHT</b>		Move rightward / Play forward
16	<b>SEL/PTZ</b>		Enter system pop-up (short cut) menu bar/ edit button / enter PTZ mode
17	<b>MENU/ESC</b>		Enter/exit system menu
18	<b>HDD indicator</b>		Continuous flicker indicates HDD is being accessed
19	<b>Power indicator</b>		Green light indicates power supply status
20	<b>IR Receiver</b>		To receive signal from remote controller

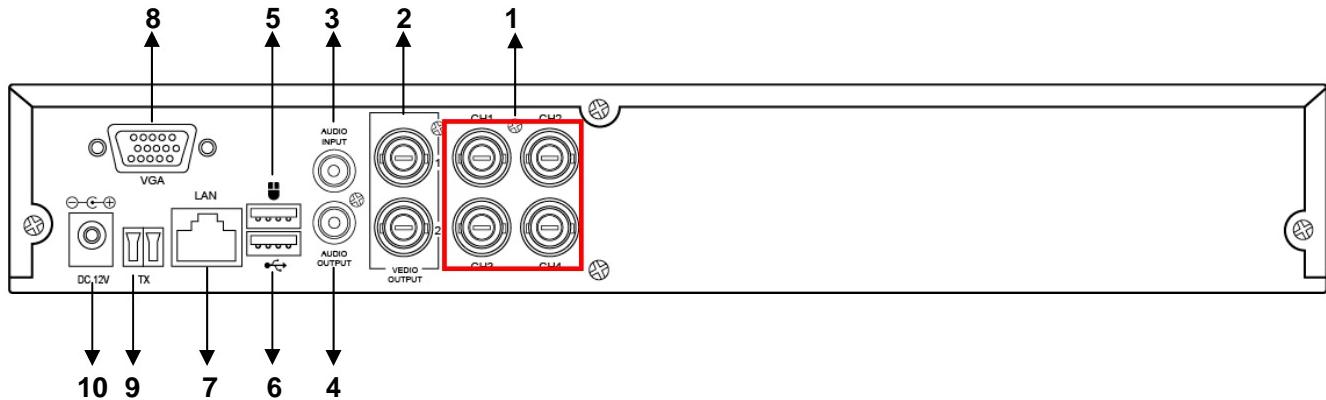
## 2.1.2. 8-CH Front Panel



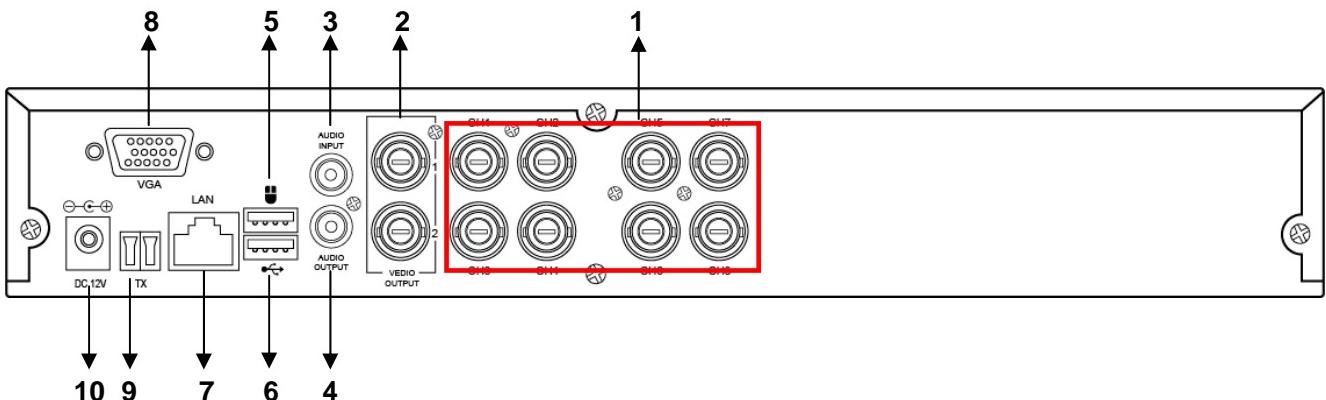
Item	Key/Indicator	Marks	Functions
1	SEARCH	⌚	Enter system pop-up (short cut) menu bar
2	CH-	⬅	Switch to previous channel
3	CH+	➡	Switch to next channel
4	ALL CH	██████	Switch to 4/8 pictures display
5	MUTE	Ⓜ	Audio mute key
6	REC	●	Start manual recording
7	REW	◀	Move leftward / Rewind
8	PAUSE	⏸	Pause / play frame by frame
9	PLAY	▶	Enter into playback mode / Play button
10	FWD	▶▶	Move rightward / Play forward
11	STOP	■	Stop Playback / stop manual recording
12	LEFT	◀	Move leftward / Rewind
13	UP	▲	Enter into main menu or exit menu
14	Down	▼	Move Up
15	RIGHT	▶	Move rightward / Play forward
16	SEL/PTZ	SEL/PTZ	Enter system pop-up menu bar / edit button / enter PTZ mode
17	MENU/ESC	MENU/ESC	Enter/exit system menu
18	HDD indicator	HDD	Continuous flicker indicates HDD is being accessed
19	Power indicator	PWR	Green light indicates power supply status
20	IR Receiver		To receive signal from remote controller

## 2.2. Rear Panel

### 4-CH Rear Panel

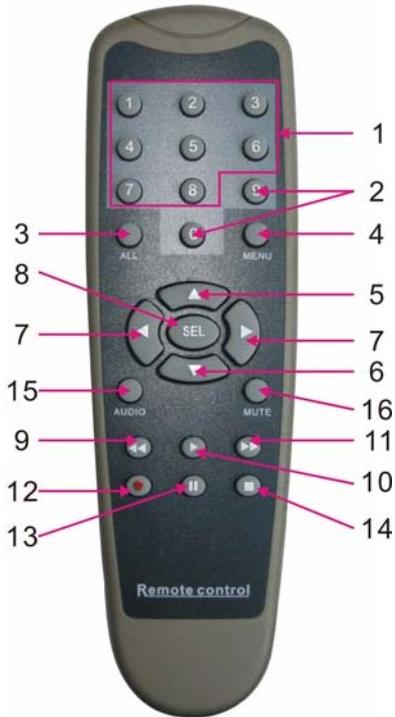


### 8-CH Rear Panel



Item	Physical port	Connection method
1	Video input	Connect CH1-4/9 (BNC interface)
2	Video output	Connect monitor output (BNC interface)
3	Audio input	Connect 1 audio signal input (RCA interface)
4	Audio output	Connect 1 audio signal output (RCA interface)
5	USB Port	Connect USB mouse
6	USB Port	Connect USB device (USB CD/DVD-RW, USB thumb disk, USB hard disk)
7	Ethernet: Port	Connect intranet, internet (RJ45 interface)
8	VGA Port	Connect to VGA monitor
9	RS-485	RS485 interface
10	Power Port	Connect power supply - DC12V,3A

## 2.3. Remote Control



<b>1</b>	<b>1-8</b>	Channel Select 1-8 ; Numeric key
<b>2</b>	<b>9, 0</b>	Numeric Key
<b>3</b>	<b>ALL</b>	Display all Channel
<b>4</b>	<b>Menu</b>	Enter/Exit Main Menu
<b>5</b>	<b>▲</b>	Up Key
<b>6</b>	<b>▼</b>	Down Key
<b>7</b>	<b>◀ / ▶</b>	Left / Right Key
<b>8</b>	<b>SEL</b>	Select Key/ Edit Key
<b>9</b>	<b>◀◀</b>	Rewind key
<b>10</b>	<b>▶</b>	Play Key, Enter to recording search menu
<b>11</b>	<b>▶▶</b>	Forward Key
<b>12</b>	<b>●</b>	Manual Recording
<b>13</b>	<b>⏸</b>	Pause / Frame Play
<b>14</b>	<b>■</b>	Stop manual recording; Stop Playback
<b>15</b>	<b>Audio</b>	Undefined
<b>16</b>	<b>Mute</b>	Undefined

### Mouse Operation

You can use a mouse instead of front panel keys or remote control to navigate the operation of your DVR

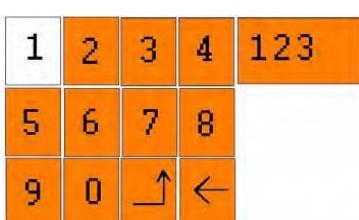
Left button of Mouse	In OSD menu, click left button to select & edit
Right button of Mouse	In live display mode, clicking right key will display pop-up menu bar In Main menu or sub menu mode, clicking right key will exit current menu.
Double-click Left button of Mouse	double-click the live image of any channel for full screen display; by double-clicking again, the display will return to display all cameras
Sliding Mouse	On motion mode, sliding mouse will select motion area; On [Color Setup] menu mode, sliding mouse will adjust color control bar and volume control bar.

### Using the Virtual Keyboard – Mouse Only

When using the mouse, you can input certain values using the onscreen virtual keyboard.

You will need to use the Virtual Keyboard when entering your User ID and Password.

To use the Virtual Keyboard:



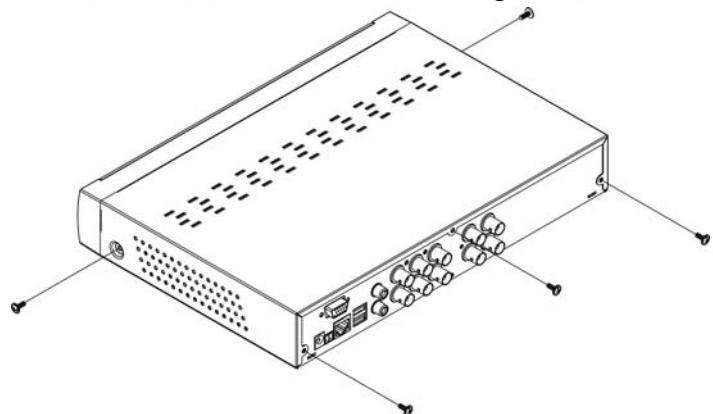
1. Click on an option or field, such as the User ID and Password fields.
2. Click **0~9** to enter the desired digit.
3. Click **123** to switch between numerals, upper and lowercase letters, and other characters (only for certain options)
4. Click **←** to Backspace/Delete.  
**NOTE:** The buttons will turn from orange to white when you select the button with the mouse cursor.
5. Click **→** to enter/confirm and close the Virtual Keyboard.

## Chapter 3. DVR Installation

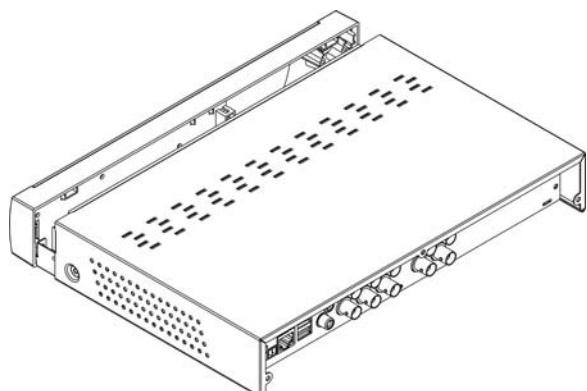
### 3.1. Hard Drive Installation

**Caution:** Please do NOT install or uninstall hard drive while DVR is running!

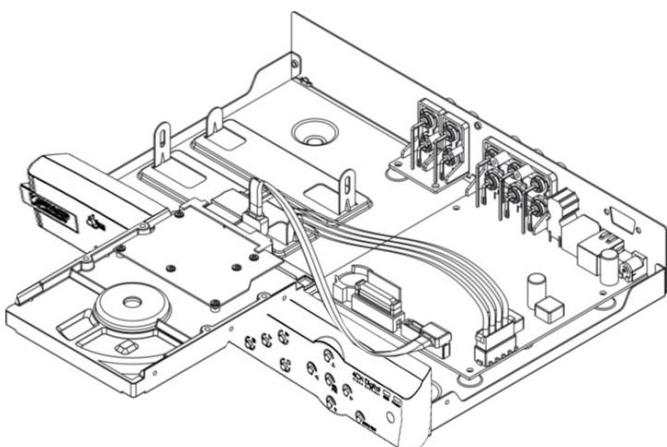
1. Loosen the screws in the left and right sides.



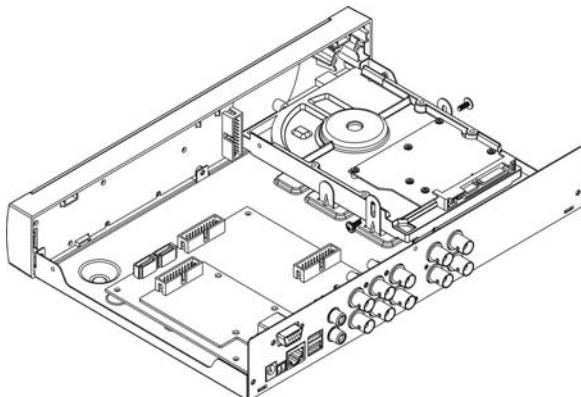
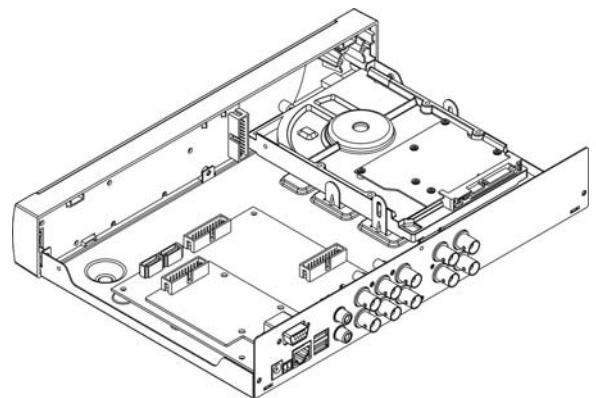
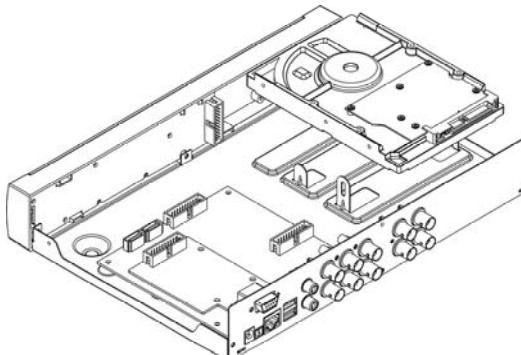
2. Remove the cover



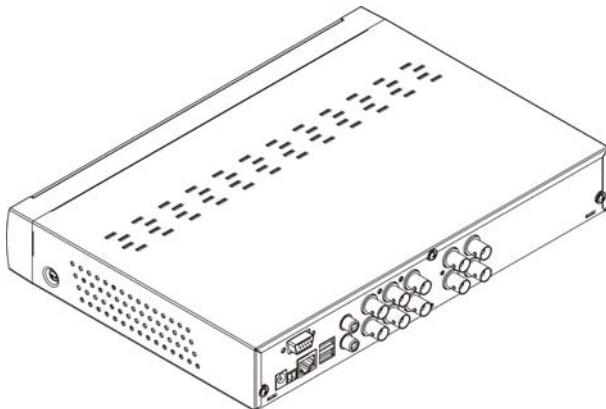
3. Connect data cord and power cable.



4. Install HDD on the bracket, fixed with screws firmly.



5. Check if the connectors are properly connected and there is no problem with wiring and close up cover, and fix it with screws.



### 3.2. Camera and Monitor Connection

Connect camera cable to video input port of DVR, and from video output of DVR to Monitor via BNC connector or VGA port (refer to system figuration on Chapter 9.6).

If the camera is a PTZ speed dome, you could connect RS485 A & B to the corresponding port on DVR respectively (refer to system figuration on Chapter 9.6).

### 3.3. Power Supply connection

Please only use the power adapter supplied with the DVR.

## Chapter 4. DVR Boot Up out

### 4.1. System Initialization



After connecting the power adapter the system will boot-up and start initializing.

### 4.2. Main Interface



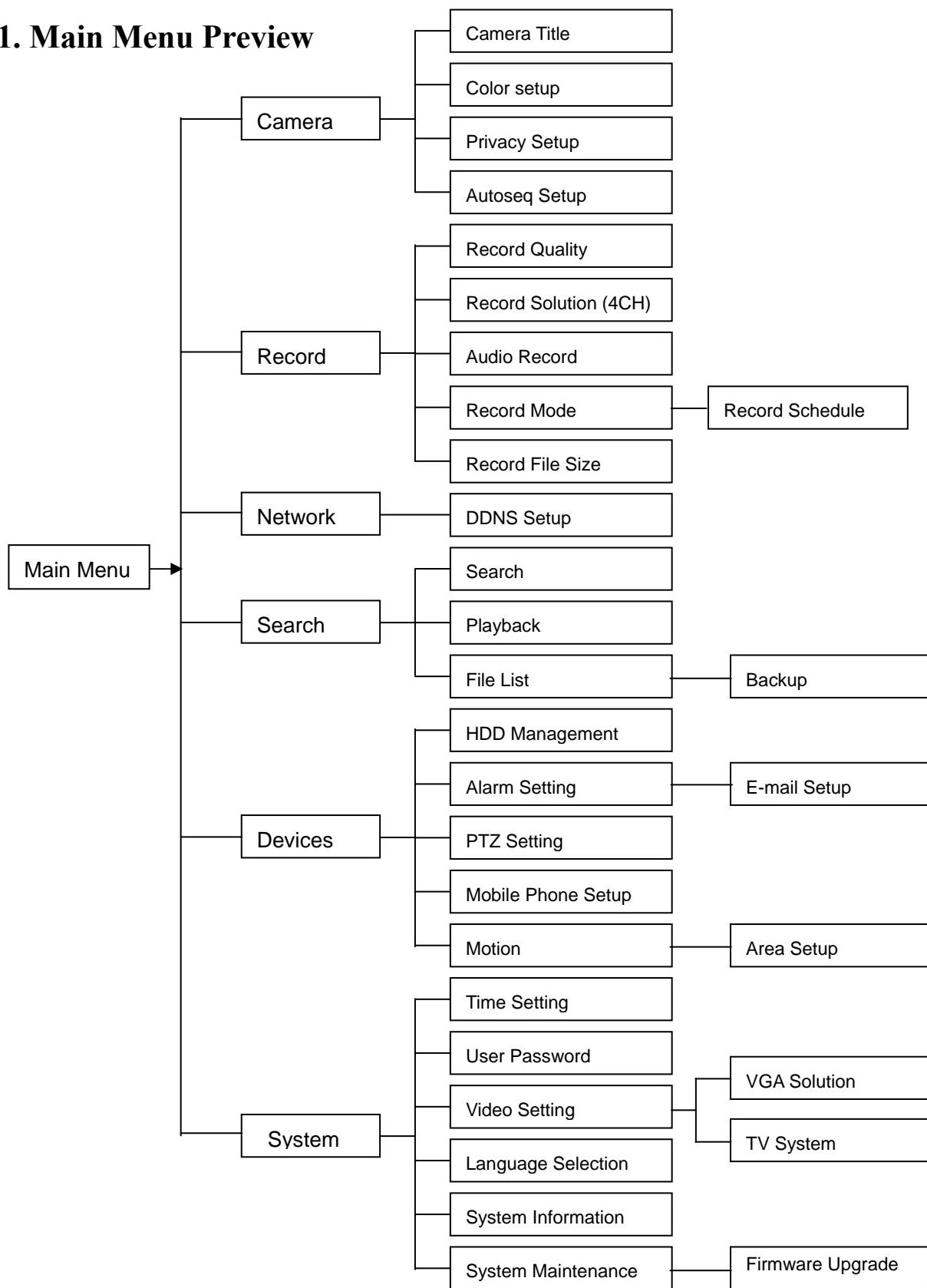
After initialization, the system will display main interface. When there are video inputs, live images from the cameras will be displayed on screen. You can use mouse to double-click the live image of any channel for full screen display; by double-clicking again, the display will return to display all cameras. On the main interface, you will be able to see current system date & time, channel title, recording status. When there is no HDD installed in the DVR, or the HDD is in abnormal working condition, system will display "H" on screen.

Press SEL button on the front panel or click the right button of mouse, you will be able to see the pop-up menu bar. It's a short cut for your quick jump to menus in common use. Detailed method to operate the pop-up menu bar will be introduced in relative chapter.



# Chapter 5. DVR Menu

## 5.1. Main Menu Preview



## 5.2. Main Menu



Press SEL button on the front panel or click the right button of mouse to display pop-up menu.  
 Select MAIN MENU to enter main OSD menu.  
 Press **▲**, **▼**, **◀**, **▶** keys on front panel to move the cursor, then press SEL key to enter selected item.  
 Or use you mouse to select and enter menu.  
 Press ESC key or click right button of mouse to return to previous window

### 5.2.1. Camera Setup

**Name:** You are able to edit the title of the camera with letter and number. Max. 8 characters.

**Position:** Edit the position to display the camera title on screen.



**Live:** Select to display live image or not. If you select OFF, the image is still recorded and you can see it in playback mode.

**DISPLAY TIME WHILE IN LIVE VIEW:** If you select OFF, you will not be able to see the system time display in live picture.

**DISPLAY TIME WHILE RECORDING:** If you select OFF, you will not be able to see the system time display in recorded picture while playing back.

#### 5.2.1.1. Color Setup

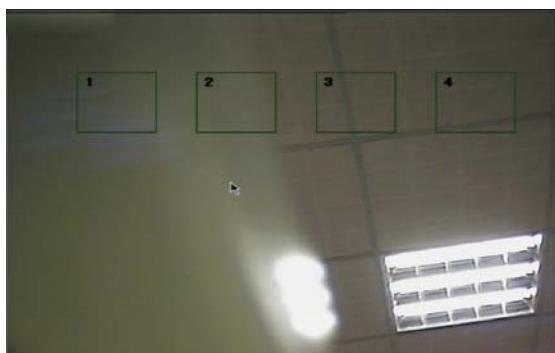
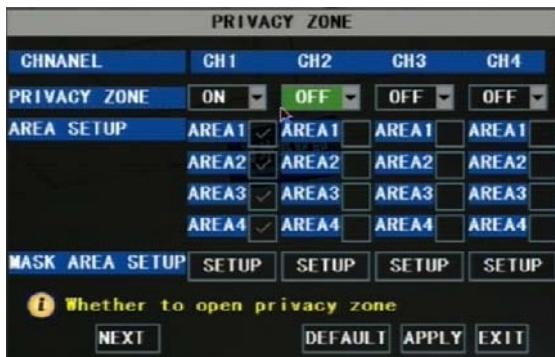


You can adjust image brightness, saturation, contrast and hue settings for each channel.

Press **▲** & **▼** key on front panel to adjust the value, or drag the bar to adjust with you mouse.

Press APPLY button to save your settings.

### 5.2.1.2. Privacy Zone Setup



**Privacy zone** function allows you to cover the private area, such as password input area on ATM machines. The covered areas will not be able to see in live view mode or in playback mode.

You can select max. 4 privacy zones for each channel.

1. Select the No. of area (AREA1 – AREA4) you want to set
2. Press SETUP button to adjust the position of the privacy zones.
3. After finishing the position adjustment, press ESC key on front panel or click right button of mouse to exit and return to **PRIVACY ZONE** page.
4. Press **APPLY** to save your settings.

### 5.2.1.3. Autoseq Setup

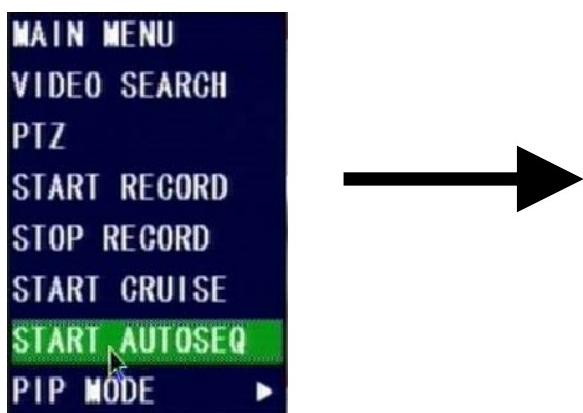


**AUTOSEQ** allows system to display every selected channel in full screen by certain dwell time, and auto-switch in sequence.

Default dwell time: 5 second

Selectable time range: 0~10 seconds

Go to main interface and trigger the pop-up menu bar, you will find the **START AUTOSRQ** menu. Click it and the DVR will enter auto sequence display mode. Press any key will exit autoseq mode.



## 5.2.2. Record Setup



4-CH



8-CH

### 5.2.2.1. Record Mode



### 5.2.2.2. Record Schedule Setup



#### Functions:

**CHANNEL:** ON/OFF option decides to record or not.

**RESOLUTION:** (4-CH only) decides the recording video resolution. About the definition of resolution, please refer to the specification chapter.

**QUALITY:** select recording video quality, higher quality will need more HDD space to save the video

**AUDIO REC.:** DVR supports to record 1 channel audio signal. Here you can bind the audio channel to an appointed video channel for together recording.

**FILE SIZE:** System record and save the videos to HDD by separate files. It indicates the maximum recoding length for every single continuous recording file (15, 30, 45, 60 minutes).

There are 2 record modes: **ALWAYS** & **TIME SCHEDULE RECORD**.

When you select **ALWAYS** record mode, DVR will execute continuous recording without stop.

When you select **TIME SCHEDULE RECORD** mode, DVR will execute recording according to your schedule.

Select **TIME SCHEDULE RECORD**, a **SCHEDULE** button will display. Click it and enter schedule setup interface.

There are 3 recording status options:

**ALARM [RED]:** Motion detection mode

**GENERAL [GREEN]:** Continuous record mode

**NO RECORD [Transparent]:** Do not record

You are able to config 24 hours recording schedule for every channel or all channel from Sunday to Saturday.

Steps:

1. Select Channel
2. Select a recording status among **ALARM**, **GENERAL** and **NO RECORD**
3. Move the cursor to the time point you want to set, click on the box in the schedule time line that you want to apply the selected record type to.
4. If you want to change another recording status, repeat step 2 & step 3.
5. You can use copy function to fast complete your settings.
6. Press **APPLY** button to save your settings.

**On the main interface, you will be able to check the recording status:**

**R:** normal recording

**M:** motion detection recording

### 5.2.2.3. Manual Recording



There are 2 short cut menus listed in the Pop-up menu: **START RECORD** and **STOP RECORD**. They are Manual record & manual stop record buttons and the **START RECORD** function only work when current recording mode is as following recording status:

1. NO RECORD
2. ALARM, but the motion is no happening now.

The **STOP RECORD** function can only stop manual recording.

### 5.2.3. Recording Search & Playback

You can enter search & playback interface by pop-up menu bar or main menu.

#### 5.2.3.1. Search



**Play back by exact date & time:**

Modify the date & time, press **PLAYBACK** button to play back video which is started from your appointed date & time.

## **Search All Recorded File:**



Press **SEARCH** button, system will search and show you the recorded status. RED color indicates ALARM recording, GREEN color indicates continuous recording. You can click the time point to play back.

For 4-CH DVR, system will play back all 4 channels at the same time.

For 8-CH DVR, system can play back 1 channel only at the same time.

## File list

To check recording event list, you can sort the files by Channel / Record Type (Normal Record / Alarm Record)



**FIRST:** Turn to the first page

**PREV:** Turn to previous page

**NEXT:** Turn to next page

**LAST:** Turn to the last page

**ALL:** Select all files in current page

**REVERSE:** Allows you to revert the selected and unselected events on the current page except those you have currently selected.

### **5.2.3.2. Playback Interface**



You can play video Forward at 2x, 4x, and 8x speeds, Slow play at 1/2x, 1/4x, 1/8x, or normal play, pause and play frame by frame using the playback control bar, and adjust volume by clicking or sliding tune control bar. When playback is finished, system will return to previous menu.

### **5.2.3.3. Video Backup**

1. Insert your USB device (USB hard disk, USB thumb drive) into the bottom USB port on the rear panel.
  2. Select one or more files

3. Press BACKUP button on the menu.

NOTE: Do not remove your USB device during making backup.



**Note:** Backup files will be in H.264 format, you can play them with Netviewer program, or convert them to AVI format using the Netviewer program that comes with the DVR, so you can use any player that supports AVI format. (Introduced on Chapter 6)

## 5.2.4. Device Management



Options in device management include Hard drive, Alarm, PTZ control, Mobile Phone Monitoring, and Motion Detection.

### 5.2.4.1. HDD Management

You will see the HDD information here.



**HDD STATUS:** HDD working status

**TOTAL SPACE:** HDD capacity

**FREE SPACE:** HDD free space

**USABLE REC. TIME:** estimated recording length of the HDD free space

**OVERWRITE:** If you select DISABLE, DVR will stop recording when HDD is full; if you select ENABLE, DVR will continuous record and cover the oldest data when HDD is full.

**DURATION DAYS:** option for you to set that how many days the video will be saved in the HDD. For example, if you set as 10, DVR will automatically delete the data which was saved 10 days ago, that means you can only search & play back the data which was saved in the past 10 days. The maximum value is 60 days.

many days the video will be saved in the HDD. For example, if you set as 10, DVR will automatically delete the data which was saved 10 days ago, that means you can only search & play back the data which was saved in the past 10 days. The maximum value is 60 days.

### 5.2.4.1.1. HDD Format



When a new HDD is installed into the DVR, the HDD status will show “NOT FORMATED”. You need to format the HDD otherwise the system cannot record.

**Warning:** If you format a HDD which is being currently used, all data saved in the HDD will be lost!

System will restart automatically after formatting the HDD.

**USB FORMAT:** to format USB devices.

### 5.2.4.2. Alarm Setup



#### BUZZER:

Option to turn **OFF** the built-in buzzer alarm, or set the buzzer alarm time.

**MD ALARM:** Option for buzzer to alarm or not when the motion detection happens

**HDD LOSS:** Option for buzzer to alarm or not when there is no HDD installed in the DVR, or the HDD is in abnormal working condition.

**HDD SPACE:** Option for buzzer to alarm or not when

HDD space is full (if you have turned off the HDD overwrite function).

**VIDEO LOSS:** Option for buzzer to alarm or not when video signal loss.

**FULL SCREEN:** Option to pop up the channels to full screen display or not when motion detection happens.

**ALARM TIME:** It determines the motion detection recording length, which means how long the motion detection recording will still record after motion stops.

**EMAIL:** Option to send live images by email when motion detection happens.

### 5.2.4.2.1. Email Alarm Notification

**Warning: We don't promise every email server is compatible with the DVR alarm notification function. Please make sure your DVR is well connected to Internet if you want to realize Email alarm function,**

SSL is a security link transport protocol. You can encrypt your communication info (including your email) using SSL to prevent hackers from monitoring your email or communication info and even your password. Please confirm with your email service provider if your email server support SSL or not.

Take GMAIL for example to demonstrate the email setting:



1. Set SSL to “On” via Gmail.com server, and set to “Off” via other mail server.
2. **SMTP Port:** indicates sender port of SMTP server. Generally the SMTP port value is 25, SMTP port of G-mail server is 465.
3. **SMTP:** smtp.gmail.com
4. **SEND EMAIL:** dvrtest@gmail.com
5. **SEND PW:** enter the login password of send email
6. **RECV EMAIL:** The email address is used to receive image transmitted from motion detection alarm of DVR.
7. Login your Gmail ID and turn to **Settings** page. Find out **Forwarding and POP/IMAP** option, then enable IMAP function.

**Settings**

[General](#) [Accounts and Import](#) [Labels](#) [Filters](#) **Forwarding and POP/IMAP** [Chat](#)

**Web Clips**

**Forwarding:**  Disable forwarding  
 Forward a copy of incoming mail to  and  keep Gmail's copy in the Inbox

Tip: You can also forward only some of your mail by [creating a filter!](#)

**POP**  
**Download:** [Learn more](#)

Enable POP for **all mail** (even mail that's already been downloaded)  
 Enable POP for **mail that arrives from now on**  
 Disable POP

**2. When messages are accessed with POP**  
 keep Gmail's copy in the Inbox

**3. Configure your email client** (e.g. Outlook, Eudora, Netscape Mail)  
[Configuration instructions](#)

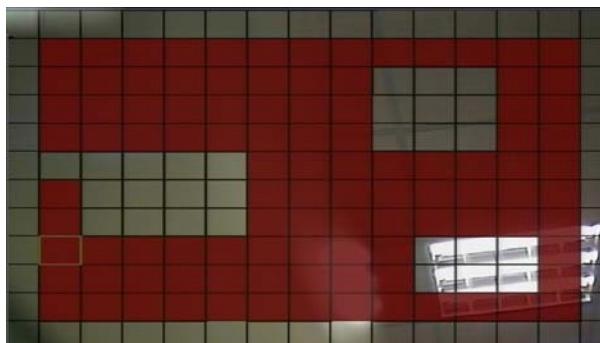
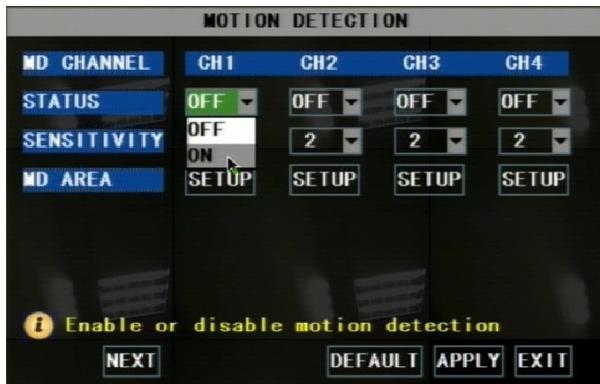
**IMAP Access:** (access Gmail from other clients using IMAP) [Learn more](#)

**1. Status: IMAP is enabled**  Enable IMAP  
 Disable IMAP

**2. Configure your email client** (e.g. Outlook, Thunderbird, iPhone)  
[Configuration instructions](#)

Save Changes  Cancel

### 5.2.4.3. Motion Detection Setup



**STATUS:** This option allows you to enable motion detection on the channels.

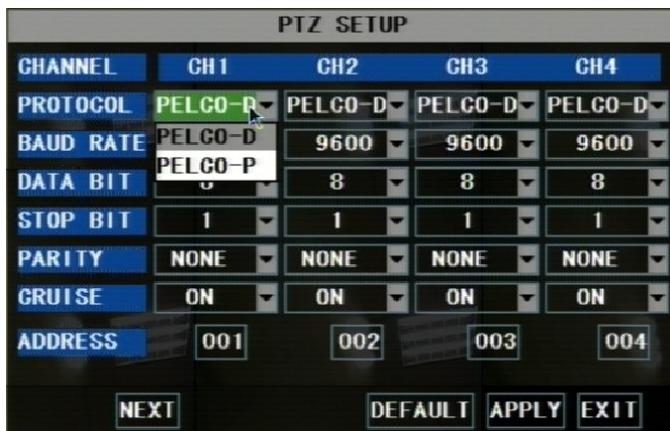
**SENSITIVITY:** This option allows you to set the sensitivity level of motion detection from 1 to 4, with 4 being the most sensitive.

**MD AREA** (motion detection area): Click this button of the corresponding channel to select the area you want to have motion detection. The channel is separated into a 13\*10 area. When any movements in the selected area are detected, recording or alarm will be triggered.

**Red area: motion detection enabled**

**Transparent area: motion detection disabled**

### 5.2.4.4. PTZ Setup



Select the channel you want to control and set PTZ (Pan Tilt Zoom) protocol (Pelco-D or Pelco-P), Baud Rate (1200, 2400, 4800, 9600), Stop bit (1, 2), Parity Check (None, Odd, Even, Mark, Space), Address Code and Cruise status respectively. Please note the above mentioned channel settings must match the settings of the PTZ camera.

### 5.2.4.5. PTZ Control



You can find the PTZ control menu on the pop-up menu bar and open the PTZ control interface. You can click Z+ & Z- keys to zoom in or out, click F+ & F- keys to control camera focus and click I+ & I- to adjust the focus point.

Open auto cruise function on PTZ setting menu if you want to setup cruise function, and set up cruise channel, cruise point, total quantity and stop time (by second) etc.



**Channel:** select the channel with the PTZ camera

**TOTAL:** set up presetting bit (angle) quantity. Please refer to your camera's manual for detail

**CUR POINT:** System has default starting (current) cruise point as 01. You can use this option to set additional cruise points

**STOP TIME:** sets the dwell time at each cruise point

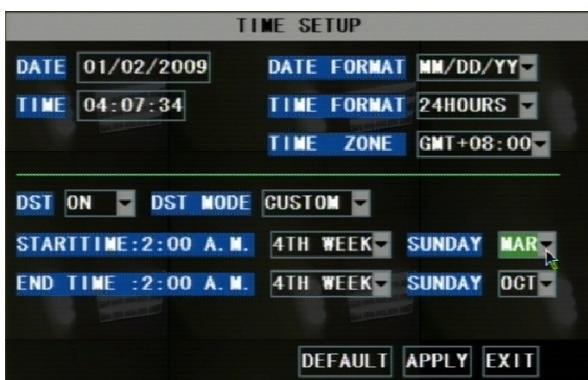
**GOTO:** Select this option to go to specific preset points

## 5.2.5. System Setup



System Setup menu allows you to config time setting, password setting, video system setting, language selection. You can also check your system information here, and upgrade the DVR firmware with the menu here.

### 5.2.5.1. Time Setup



**DATE:** config the day, month, and year

**DATE FORMAT:** Select **DD/MM/YYYY**, **MM/DD/YYYY**, or **YYYY/MM/DD**

**TIME:** config the time

**TIME FORMAT:** Use the drop-down menu and select **12HOURS** or **24HOURS**

**DST:** (day saving time) Use the drop-down menu to select ON/OFF to enable/disable Daylight Savings Time.

Click **APPLY** button to save your settings.

## 5.2.5.2. Password



This option allows you set the device ID for the DVR and set the system password if you want to use one. Click **APPLY** button to save the settings.



When you have enabled Password by setting the option to “ON”, you can setup a user password and administrator password respectively. The password supports up to 6 characters. Click “APPLY” to save the settings.

**NOTE:** Please write down your passwords and store in a safe location. If you forget your password, please contact our technical support immediately.



### Difference of **USER PASSWORD** and **ADMIN PASSWORD**:

Login with **USER PASSWORD**, you can only operate Search & Playback function, and view the live images. You’re limited to check & change any system settings.

Login with **ADMIN PASSWORD**, you will have the authority to operate all menus.

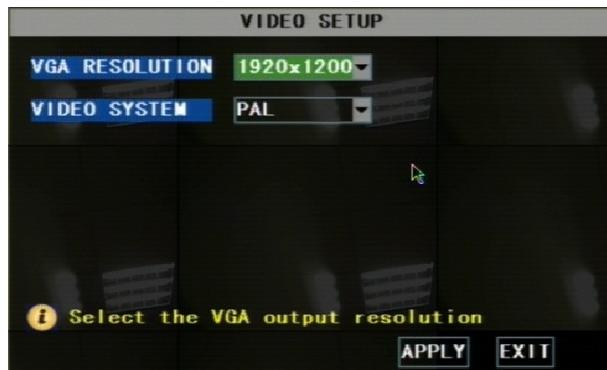
## 5.2.5.2.1. Menu Lock



**MENU LOCK** menu only displays on the pop-up menu bar when password protection is enabled.

When you exit the main menu, the system will remember your login information for a while so that you don’t need to input the password for your repeat login in a short time. You can use this menu to lock your system menu immediately.

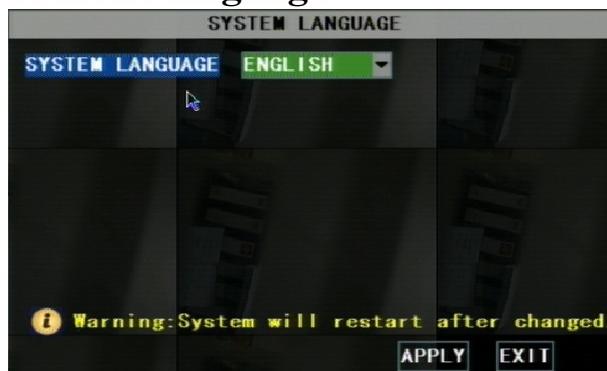
### 5.2.5.3. Video Setup



**VGA RESOLUTION:** select the VGA video output solution to match your VGA monitor from 800x600, 1024x768, 1280x1024, 1440x900 and 1920x1200.

**VIDEO SYSTEM:** Select the TV system from PAL and NTSC

### 5.2.5.4. Language



Select system OSD language.

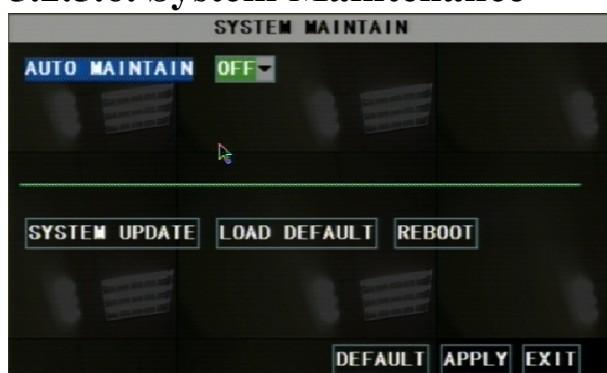
System need to restart in order to complete the language switch after you APPLY the change.

### 5.2.5.5. Info



You can check the system information, including Device Type (model No.), Software (firmware) version and MAC address.

### 5.2.5.6. System Maintenance



This option allows you reset the DVR to default settings, update system software (firmware), and config system auto-maintenance.

When the auto-maintain function is enabled, you can set system to restart regularly to clear up some temporary storage memory.

## 5.2.6. Network Setup



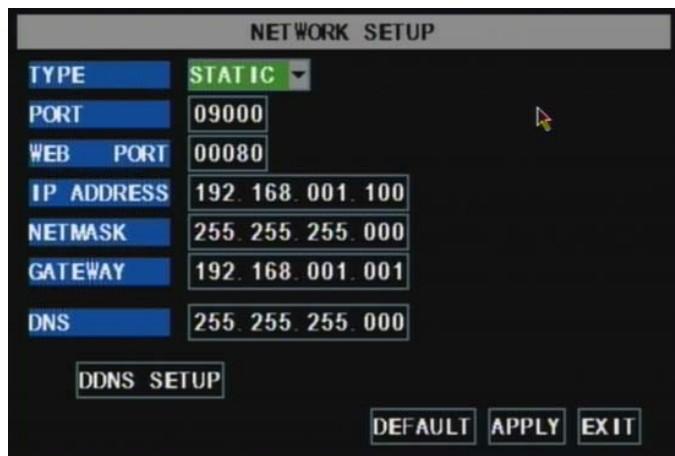
Your DVR supports to be remotely accessed via network, so that you can remotely control the DVR for monitoring, recording, playing back or making backup. Prior to the remote access, you need to set the network configuration at **MAIN MENU → NETWORK** interface.

### 5.2.6.1. Intranet/LAN Access Setup

If your DVR is connected to a router of your LAN (local area network), then you can setup the NETWORK Setup section of the DVR to view the image your DVR is recording remotely using computers connected within your LAN.

**Note:** Prior to changing the NETWORK Setup of your DVR, it is strongly recommended that you perform the following tasks:

1. Access the configuration page of your router.
2. Reserve an IP Address in your router that is not used by other computers or devices connected to your internal network.
3. Write down the assigned IP Address of your DVR, Subnet Mask, IP Address of the router (Gateway) your DVR connect to for future reference.



- A. Select STATIC as the network TYPE.
- B. Setup PORT (media port)
- C. Input the WEB PORT (Must be different from media PORT)
- D. Enter the IP Address that you have reserved at the beginning of this section into this field to be the unique address of your DVR in your local network.
- E. NETMASK: It is recommended to leave the Subnet mask as the default 255.255.255.0.
- F. Set the GATEWAY to the IP Address of your router.
- G. Enter the DNS (Domain Name Server) Address; set this to you router's IP address.
- H. Click "APPLY" to save your change.

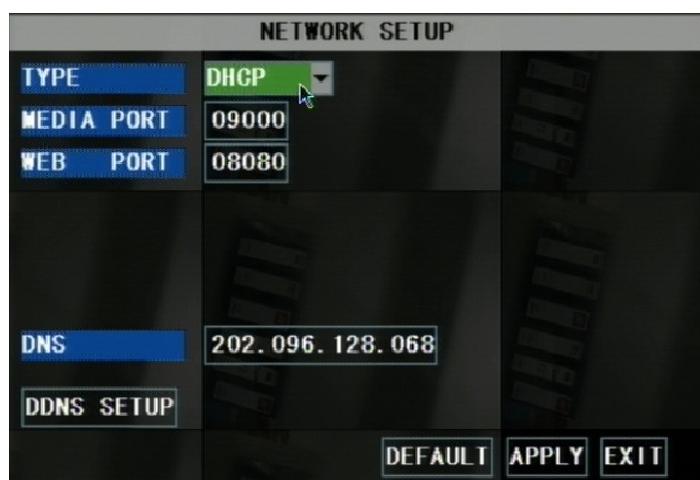
## 5.2.6.2. Internet Access Setup

**Important Note:** If you are using a DSL modem, the modem must be set to “bridge mode”.

**Note:** Before the NETWORK configuration, it is strongly recommended that you perform the following tasks:

1. The DVR supports 3 common types of Internet Services: DHCP (Cable Modem), PPPoE (DSL Modem) and Static IP (Fiber Optics). Please check with your ISP (Internet Service Provider) what kind of service you are exactly using.
2. Write down the: IP Address (if your ISP is using Static IP), Subnet Mask, Gateway Address, DNS Address provided by your ISP

If your ISP uses DHCP network, select **DHCP** network TYPE.



1. Input the PORT(media port)
2. Input the WEB PORT (Must be different from media PORT)
3. Click the “DDNS SETUP” Button.
4. You will need to apply for a Dynamic DNS account and register a Domain Name with one of the known DDNS provider. Enter your DDNS Provider’s HOST NAME, USERNAME, and PASSWORD in the DDNS SETUP page.

We recommend applying a free DDNS account at [www.dyndns.org](http://www.dyndns.org)

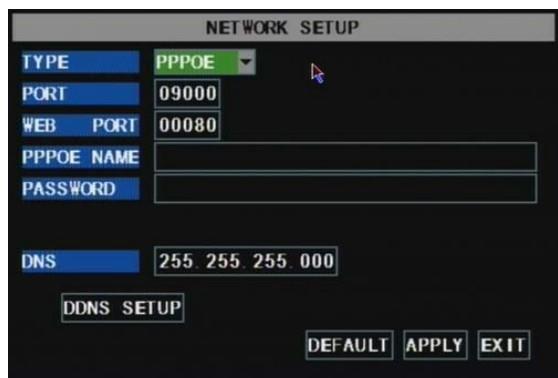


If your ISP uses STATIC IP network, select **STATCI** network TYPE.



1. Input the PORT (media port)
2. Input the WEB PORT (Must be different from media PORT)
3. Enter the IP Address that you have reserved at the beginning of this section into this field to be the unique address of your DVR in your local network
4. NETMASK: It is recommended to leave the Subnet mask as the default 255.255.255.0.
5. Set the GATEWAY to the IP Address of your router.
6. Set the DNS (Domain Name Server) Address to the IP Address of your router
7. Click "APPLY" to save your changes.

If you are using PPPoE dial-up network, select **PPPoE** network TYPE.



1. If your ISP provides you a Static IP Address, select STATIC as the network TYPE.
2. Input the PORT (media port)
3. Input the WEB PORT (Must be different from media PORT)
4. Enter your PPPoE NAME and PASSWORD so your DVR will be able to obtain service from your ISP.
5. Enter the DNS (Domain Name Server) address.
6. You will need to apply for a Dynamic DNS (DDNS) account and register a Domain Name with one of the known DDNS provider. Enter your DDNS Provider's HOST NAME, USERNAME, and PASSWORD in the DDNS SETUP page.

### 5.2.6.3. Ports

Recommended media & web port input range: 1024 to 65535. If you want to visit your DVR from internet, you must forward the ports used in the DVR network settings at the virtual server option of your router.

# Chapter 6. Network Access

There are 3 methods to remote access the DVR via network: Internet Explorer Browser (IE), Netviewer client software & Mobile phones.

## 6.1. IE & Netviewer Access

You can use Netviewer client software & Internet Explorer (IE) 6.0 or newer version to remote access the DVR.

### 6.1.1. IE Setup

For the first time you are using the IE to access the DVR, you need to modify your browser controls

Take IE 7 for example to demonstrate how to modify your browser controls:

#### 1. Turn OFF “Pop Up Blocker”

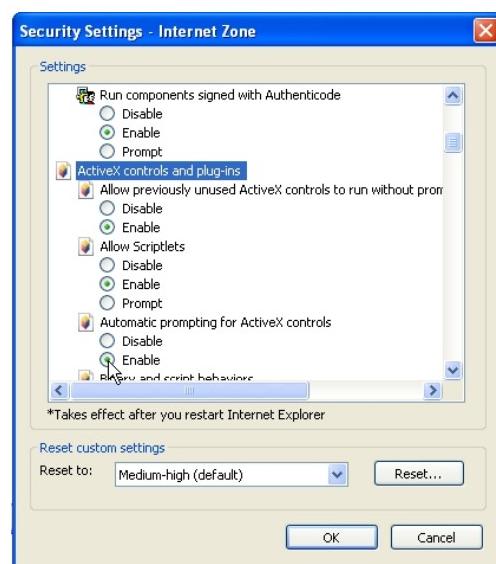
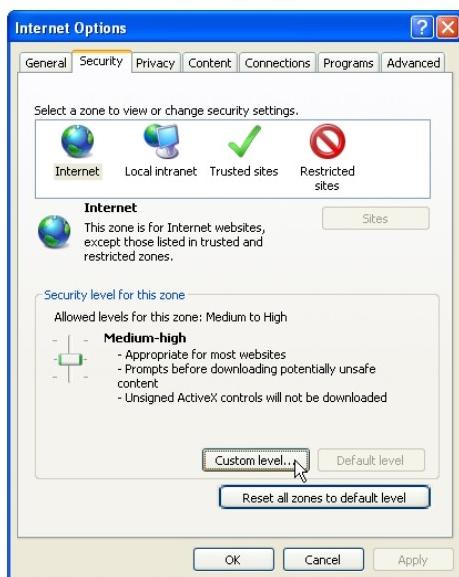
Go to Tools → Blocker, and then select “Turn Off Pop-up Blocker”.



#### 2. Access & Enable all ActiveX Controls

Go to “Tools” → “Internet Options” → “Security” tab, then click “Custom level...” button.

On this page scroll down to the ActiveX Controls and Plug Ins, and set all to either **PROMPT** or **ENABLE**.



**Warning!** It is strongly recommended to return all Internet Explorer Security to its default settings after the ActiveX Control has been installed. Enabling all ActiveX controls put your computer at risk of being attacked by computer virus.

## 6.1.2. Connect to DVR

To connect to the DVR from a remote computer, you would then open an Internet Explorer browser window and enter the Internet IP of your router that you received by going to [www.myipaddress.com](http://www.myipaddress.com).

If you get an error message “Program cannot load because the Publisher is unknown” or the program is unsigned, then go to Internet Explorer --> Tools --> Internet Options, then click on the ADVANCED tab on the top right. This will open the window in, scroll down to “Security”, and select on the options to “Allow software to run or install even if the signature is invalid”, and “Allow Active Content to Run Files on My Computer”.

Open Internet Explorer and enter the IP Address or DDNS address of your DVR. A pop-up will ask you to install an ActiveX (plug-in) to your computer. Please confirm the download and install the software.

**Reminder:** If the ActiveX (plug-in) is not downloaded successfully, please check if your browser’s safety level or firewall setting is set properly (as stated above). Please also make sure all of the setup of your modem or router is setup properly.

### 6.1.2.1 IE Plug-in & Netviewer Interface

The screenshot shows the "USER LOGIN" interface. It includes input fields for IP ADDRESS (172.18.2.100), MEDIA PORT (9000), and NETWORK (INTERNET). There are also fields for PASSWORD and a dropdown menu. Below the fields are two buttons: "LOGIN" and "RESET".

Open the DVR IP address or DDNS domain name with IE, or run the Netviewer software, the LOGIN interface will load. Input the login information, and then press LOGIN button.

The default password is null.



After successfully Logged in, system will open the live display interface and connect to audio/video feed automatically. You will be able to see the live images transmitting from DVR.

## 6.1.3. Control Network Access

### 6.1.3.1 Live

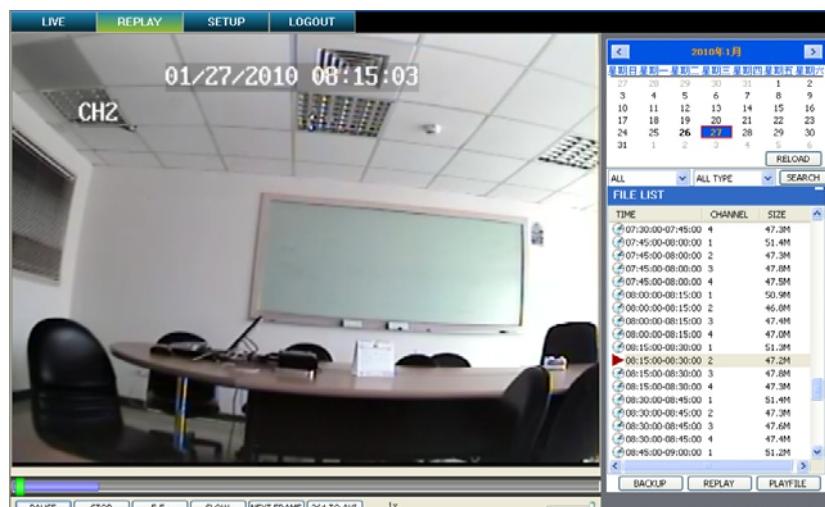
1. On / Off Live display [ ]: When the live display status is “On”, clicking the button to close live display. When the live display status is “Off”, clicking the button to open live display.
2. Capture [ ]: Capture Screen image and save to PC as \*bmp image.
3. Recording [ ]: Operate DVR recording remotely
4. Channel display [ ]: The icons stand for Single Channel display, Quad Channel display, 3x3 Channel display and 4x4 Channel display respectively.
5. Volume control [ ]: Click or slide the control bar to adjust sound volume.

### 6.1.3.2. Setup

Click “SETUP” on the top menu bar to set DVR system configuration. You can set “Recording Mode”, “Alarm Mode”, “PTZ Control”, “Network Setting”, “System Setting” and check “Host Info” here.

Please refer to chapters 5 about how to set the DVR system configuration mentioned above.

### 6.1.3.3. Replay



**264 TO AVI button:** convert file from H.264 format to AVI format



This option allows you to playback recordings remotely.

1. Select the day, channel and type then proceed searching and reload.
2. Select any event from search result list to playback.

**Play:** Play and Pause

**Stop:** stop playing recording

**F.F.:** fast forward playback recording

**Slow:** slow playback recording

**Next Frame:** play frame by frame

### 6.1.3.4. Convert 264 file to AVI file

The native format of the backup files is H.264, you can convert H.264 format into AVI format by clicking the key of 264 to AVI.

1. Click the “264 TO AVI” button, the AVI Convert window will open.
2. Determine the source H.264 file & the destination to save the avi file.

3. Click **CONVERT**. File conversion begins. The progress bar indicates the status of the conversion.
4. Click **OK** in the confirmation window.

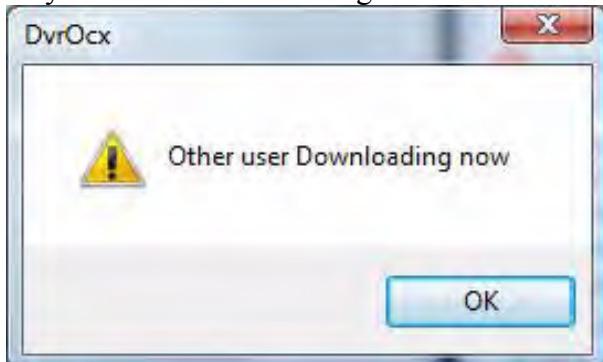
### 6.1.3.5. Remote Backup

You can backup recorded video files from DVR to your PC using the Replay menu in the remote surveillance software.

To backup files remotely:

1. Click **REPLAY** at the top of the main screen.
2. Select a date on the calendar and click **RELOAD**.
3. Double-click a file from the File List to begin playback.
4. Click **BACkUP**. Backup begins to C:/DVR/[ip address]/Backup

**NOTE:** If you playback a file, you must wait for the file to load before backing it up, otherwise you may receive an error message



When file backup is complete, click **OK** in the confirmation window. The confirmation window show the save path of the backup file. The backup files are saved as .264 files.

### 6.1.3.6. PTZ Control

1. **PTZ direction control:** Control PTZ moving direction
2. **Zoom, Focus and Iris Control:** control direction, zoom, focus and iris of PTZ.
3. **Presetting bit Control**

**CUR:** display current presetting bit or input a presetting bit you would like to fix at according to the edit box.

**Load:** Load one previous setting you have saved last time.

**Save:** Save setting.

**Set:** Set presetting bit parameter

**GOTO:** on the preview mode, please input a setting for presetting bit no and click “GOTO” button to preview the setting.

**Clean:** clear presetting bit setting

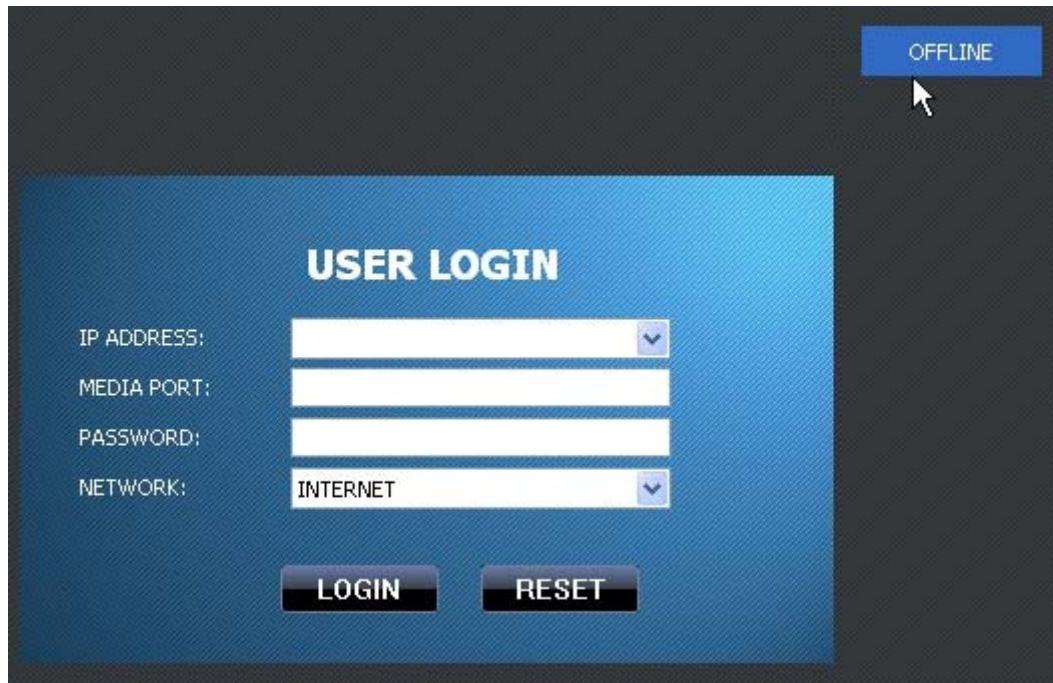
**Cruise:** control cruise status (including on and off).

### 6.1.3.7. Logout

Log out the system.

### 6.1.3.8. Playback Local File with Netviewer

Run the Netviewer software, you will see the **OFFLINE** button displayed on the Login interface. Press this button to enter local file playback mode.



Press the **ADD** button to add backup H.264 files or folder saved in your computer, you will see the files will be listed in the queue window, select a file then press **PLAYFILE** button to play.



## 6.2. Mobile Phones Access

This function allows you to view 1 channel live image at the same time with your mobile phone.

The DVR is currently compatible with mobile phones running Windows® Mobile, Symbian® S60 3<sup>rd</sup>/5<sup>th</sup> Edition operating systems, iPhones® and Blackberry® on GPRS and/or 3G networks.

### 6.2.1. Mobile Setup

Before you can view the live image from your DVR with compatible mobile phones, you need to set the settings first. Please also make sure your DVR has well connected to Internet.

Go to MAIN MENU → DEVICIE → MOBILE, config the mobile phone login settings



**USER NAME:** is the user name to enter when logging into the DVR.

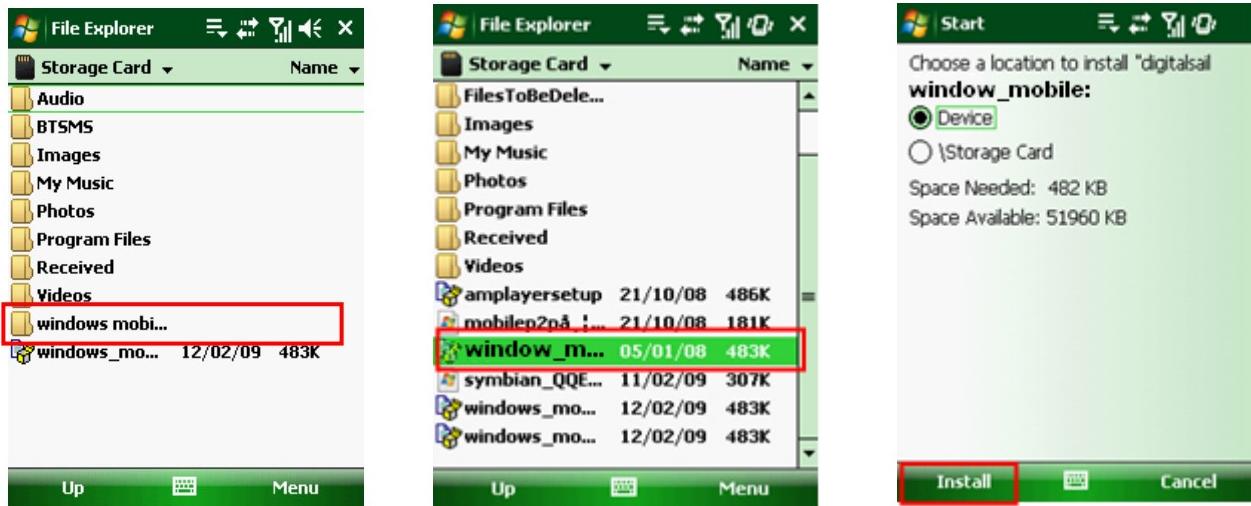
**USER PASSWORD:** is the password to enter when logging into the DVR.

**SERVER PORT:** Mobile monitoring port. Setting range is between 1024 and 65535. Please note that the server port number must be different from the network ports you have appointed in the NETWORK settings.

**NOTE: You also need to forward this port at the virtual server option of your router.**

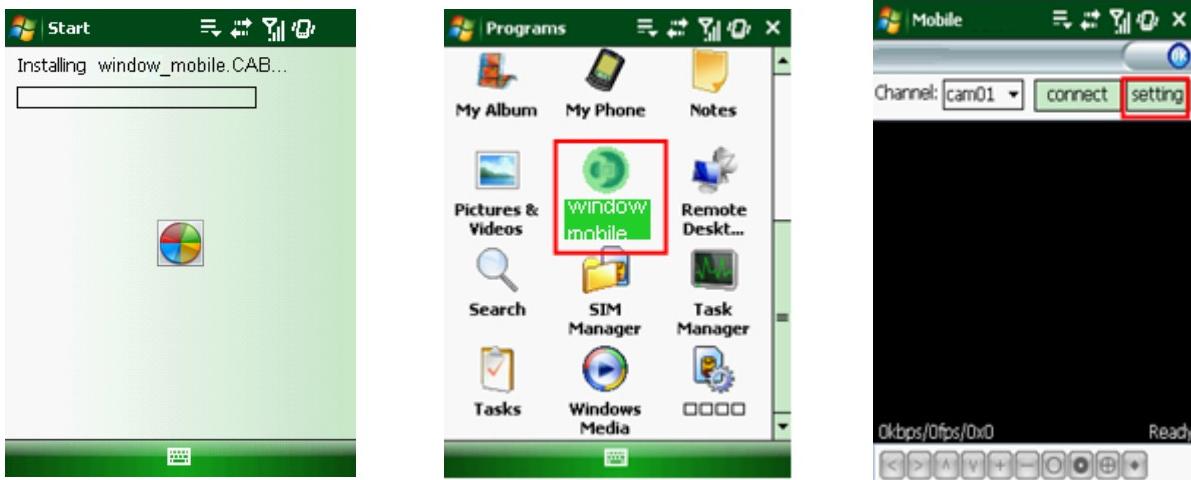
#### 6.2.1.1. Install & Operate Mobile Client in Windows® Mobile Phones

1. Install the webcam program that is included on the supplied CD by copying the “window\_mobile.CAB” file to the mobile phone. You can do this by attaching the mobile phone to a computer and copying the file from the CD to the phone.



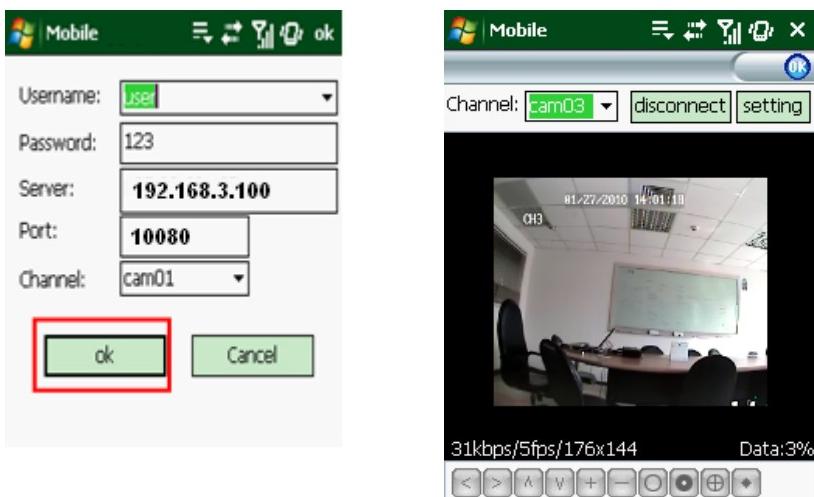
2. Click the windows mobile folder and choose the file “window\_mobile”. Select the file which will open the window. The file is generally default to save to the Device’s built-in memory, but you can choose to save it to Storage Card.

3. Choose storage location and click “Install” to start the installation.



4. After installation finishes, click the icon named window mobile to run the program. This will display the program screen.

5. Click the “Setting” button to enter the Setting menu.



**User name:** same as user name setup in DVR MOBILE setup

**Password:** same as password setup in DVR MOBILE setup

**Server:** DVR's public IP address or DDNS domain name

**Web port:** Same as the Server Port you setup in DVR MOBILE setup

**Channel:** Select the channel you want to monitor and click “OK” to display the screen to start viewing the live image.

6. To stop viewing the live video, click the “Disconnect” button or click the “Setting” button to modify the settings.

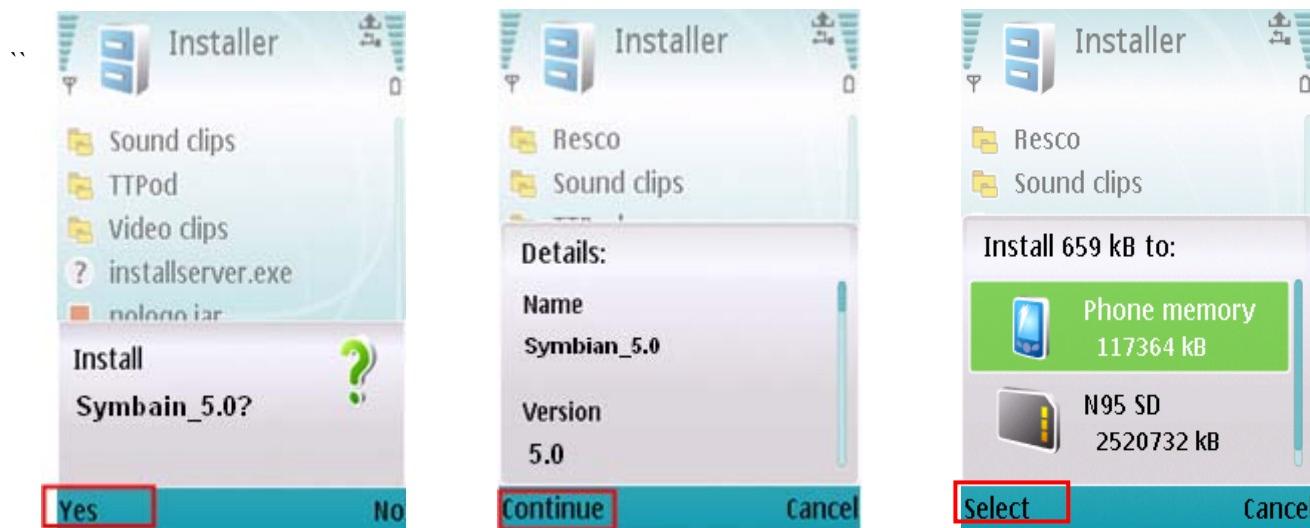
Function of Buttons under the video image from left to right: PTZ control (Left, Right, Up and Down), area select (Zoom out and Zoom in), Focus (Add “+” and deduct “-”) and Iris (Add “+” and deduct “-”) and Snap to capture screen image.

### 6.2.1.2. Install & Operate Mobile Client in Symbian® Phones

1. Install the webcam program that is included on the supplied CD by copying the “Symbian\_3.0.sisx” (Symbian 3.0 version) or “Symbian\_5.0.sis” (Symbian 5.0 version) file to the mobile phone. You can do this by attaching the mobile phone to a computer and copying the file from the CD to the phone.
2. Select the Symbian\_3.0/Symbian\_5.0 icon in this window to install it.



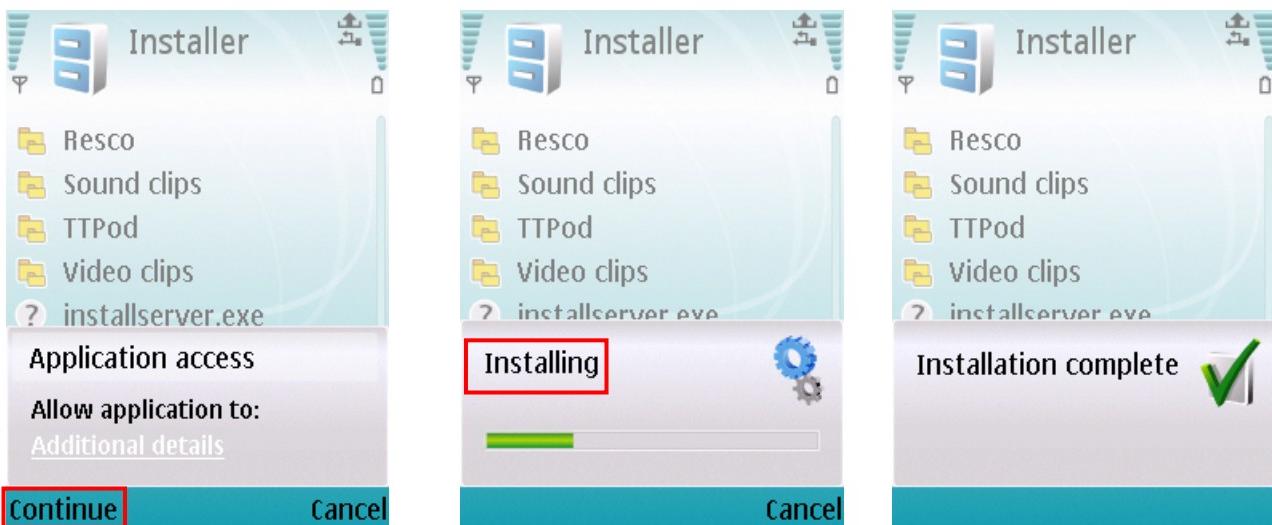
3. After the phone finishes copying the file, it will ask for permission to install the program. Select “Yes” to start the installation.



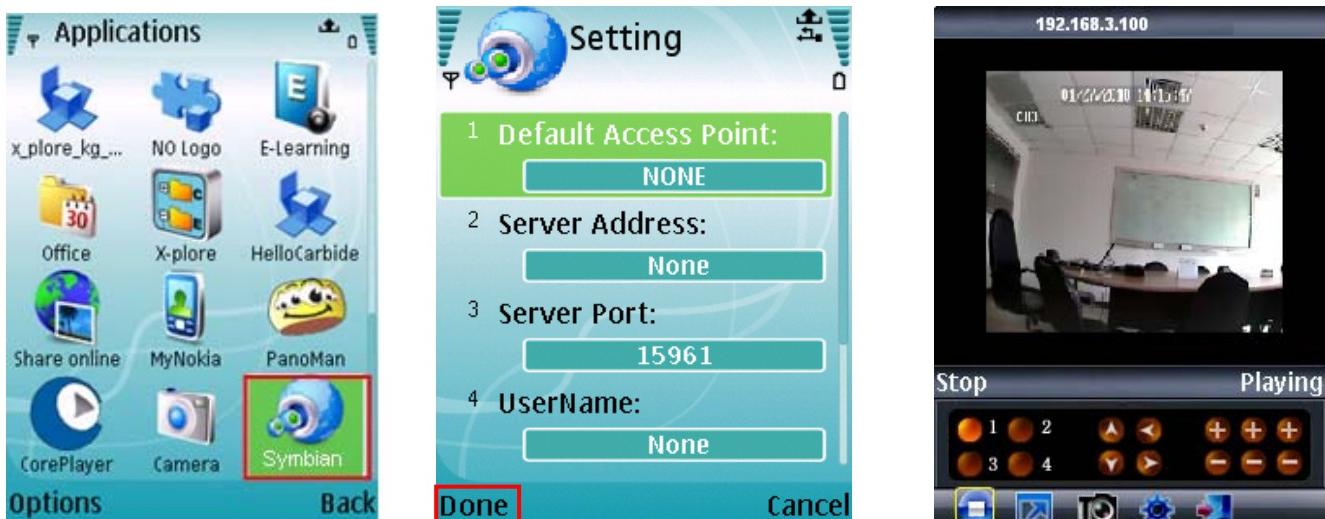
4. Click the “Continue” button on the information box displaying the program and current version.

5. Select the location of where you want to install the program, to phone memory or to the memory card, and then click “Select”.

6. Click “Continue” and wait for the program to install.



5. Once the installation is complete, go to the Applications folder and select the “Symbian\_5.0” program, and click “Open” to display the settings menu.



**Default Access Point:** Input the access point. System default for the access point is GPRS connection.

**Server Address:** DVR's public IP address or DDNS domain name

**Server Port:** Same as the Server Port you set in the DVR under section 5.2.10.4.

**User name:** same as user name setup in DVR MOBILE setup

**Password:** same as password setup in DVR MOBILE setup

**Web port:** Same as the Server Port you setup in DVR MOBILE setup

**Channel:** Select the channel you want to monitor and click “DONE” to display the screen to start viewing the live image.

Channel select, PTZ control, Zoom in/out, Focus and Iris

## 6.2.1.3. Install & Operate Mobile Client in iPhone®

### Step 1: Download iTunes

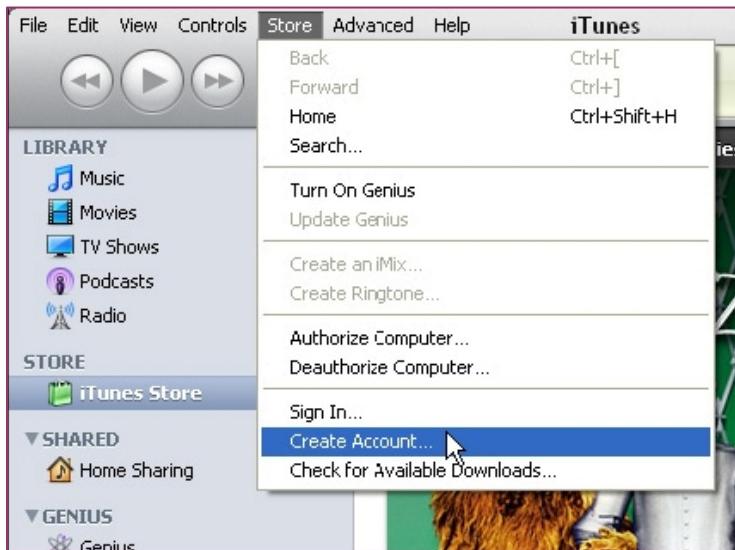
Visit Apple website <http://www.apple.com/itunes/> to download & install the iTunes.



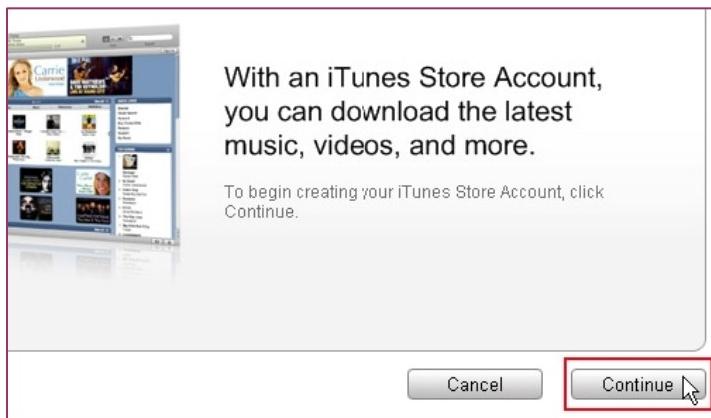
### Step 2: Download & install surveillance software “Aplayer”

#### 2.1 Register iTunes Store

2.1.1 Run the installed iTunes, you might need to create an account to visit iTunes store firstly. Move to the menu “Store”, and click the option “Create Account”.



#### 2.1.2 Continue



### 2.1.3 Select & continue

om, Inc., used under license. 1-Click is a convenient feature that allows you to Store with a single click of your mouse or other input device. When accessing buying or renting (as applicable) may be activated for all your transactions by " check box in the "Are you sure you want to buy and download ... ?" dialog box You may reset this selection at any time by clicking "Reset Warnings" in your your iPod or iPhone, 1-Click is activated for each transaction by pressing the

I have read and agree to the iTunes Terms and Conditions.

[Printable Version](#)

[Cancel](#) [Continue](#)

### 2.1.4 Fill in your personal info & continue.

You will not be charged until you make a purchase.  
If the billing address of your payment information is not in the United States, click here

**Payment Method**

Credit Card:

Card Number:  Security Code:  What is this?

Expires:  /  2009

**Address**  
Please enter at most 3 letters or numbers for state. The Zip Code must be a 5-digit number.

Salutation: Mr. <input type="button" value="▼"/>	Last Name: <input type="text"/>
First Name: <input type="text"/> Yourname	Last Name: <input type="text"/> Yourname
Address: Your address <input type="text"/>	
City: <input type="text"/> Your city	State: <input checked="" type="radio"/> CA - CALIFORNIA <input type="button" value="▼"/>
Zip Code: <input type="text"/> 95052	Phone: <input type="text"/> 408 <input type="text"/> 7669904
Country/Region: United States	

Apple uses industry-standard encryption to protect the confidentiality of your personal information.

[Go Back](#) [Cancel](#) [Continue](#)

**Please note that the options of Payment Method are different from different regions, please select another payment method. Don't worry, “Aplayer” is free software & you don't need to pay for it.**

### 2.1.5 Finished the register, and go to your email box to verify your account.

**Verify Your Account**

Secure Connection

An email has been sent to the address below with a link to verify your account. Make sure to check your email and follow the link to complete your account sign up.

**aplayerid@gmail.com**

[Resend the email or change your email address](#)

\*\*

[Done](#)

Click the link included in the email message.

**Dear Yourname Yourname,**

Your iTunes Store Account has been set up, with the following Apple ID:



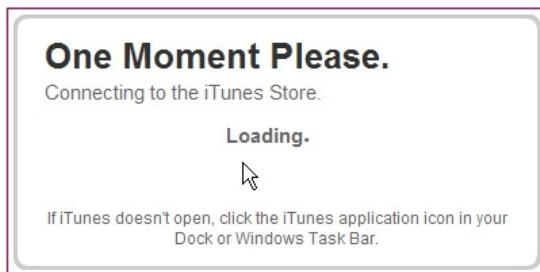
Please click the link below to verify your account, then sign in to the iTunes Store using your new Apple ID and the password you created when you set up your account.

<https://buy.itunes.apple.com/WebObjects/MZFinance.woa/wa/verifyAccountEmail?evcode=VT6KXL6PMRXX4>

Sincerely,

The iTunes Store Team  
Apple Inc.

It will connect to the iTunes store and turn to iTunes interface.

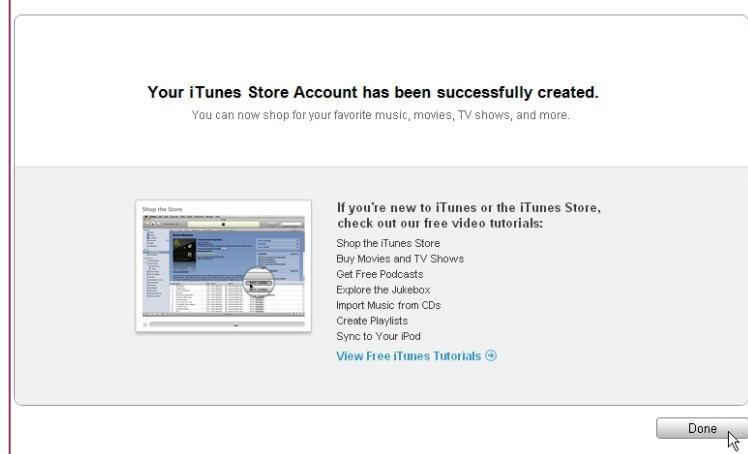


Sign in your account.



The register of your iTunes store account has been done.

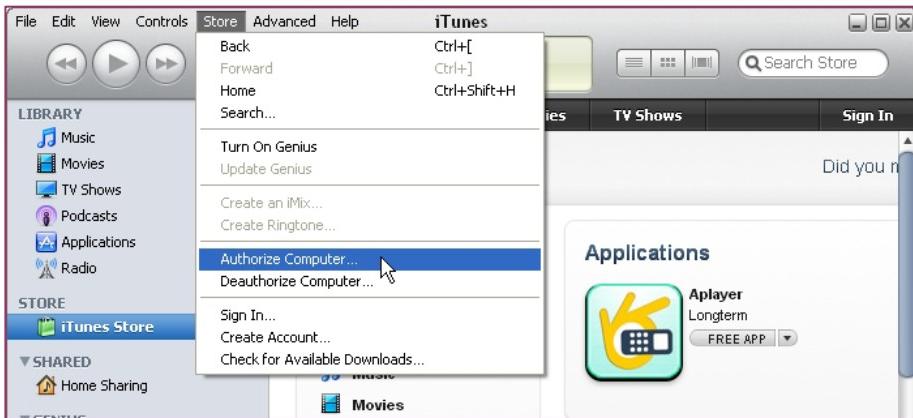
Congratulations



## 2.2 Authorize Computer

You need to authorize your computer with the registered ID.

Move to the menu “Store”, and click the option “Authorize Computer”.



Input your registered ID & password, then click Authorize button.



## 2.3 Download & install “Aplayer” into your iPhone

2.3.1 Click iTunes Store(1), then input “aplayer” into the search bar(2) on the right upper corner and press Enter.



You will find the Aplayer icon displayed as below.



2.3.2 Click the icon and it will turn to the download page. Click the “GET APP” button to download the file.



You will find the downloaded file on the directory of Application



2.3.3 Connect your iPhone to the computer, you will find your Device displayed on the left sidebar. Select the DEVICES ID(1), and then click “Applications” option(2). Select the “Sync Applications” & “Aplayer” (3) and then click “Sync” button(4).



The devices ID is different from different iPhones.

After finishing the sync, you will find the Aplayer Icon on your iPhone

### Step 3: Setup & run “Aplayer”

Main interface of Aplayer & function keys:

- I . Direction keys of PTZ control
- II . Zoom+ & Zoom-
- III . Focus+ & Focus-
- IV. Iris+ & Iris-
- V . Channel selection keys
- VI. Play & Pause
- VII. Snapshot
- VIII. Full screen
- IX. Next group of channels
- X. Setup



### 3.1 Access information setup

Turn into setup menu, and fill in the information according to your DVR Mobile settings.



**Server IP:** input the IP address or domain name to visit your DVR

**Port:** same with the server port you have set in your DVR mobile settings

**User ID:** same with the user name you have set in your DVR mobile settings

**Password:** same with user password you have set in your DVR mobile settings

After finishing the settings, press “Back” button to the main interface.

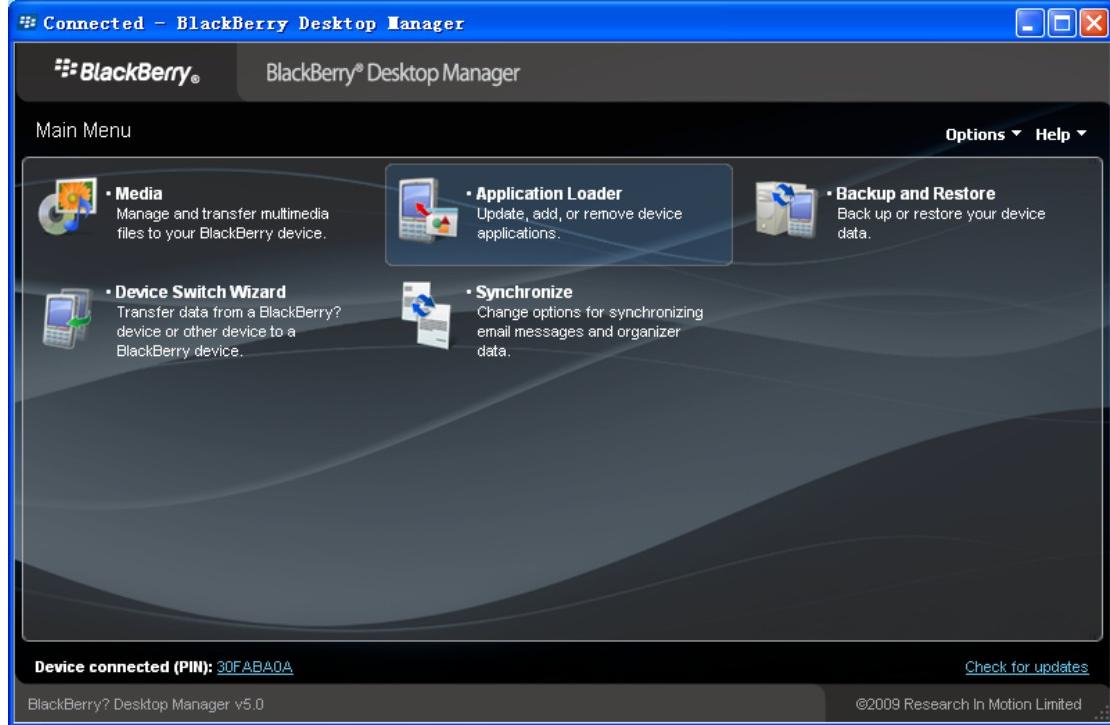
Press Play button to start mobile surveillance.

Press channel selection keys to switch camera picture.

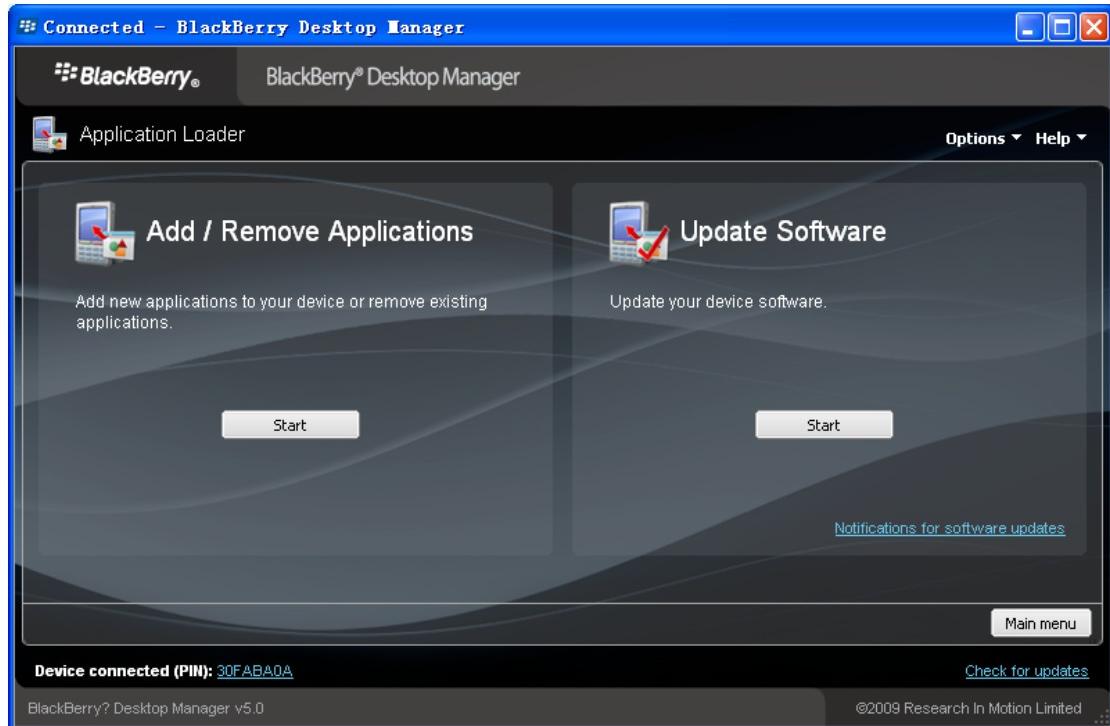


## 6.2.1.4. Blackberry Handheld Application Installation Guide

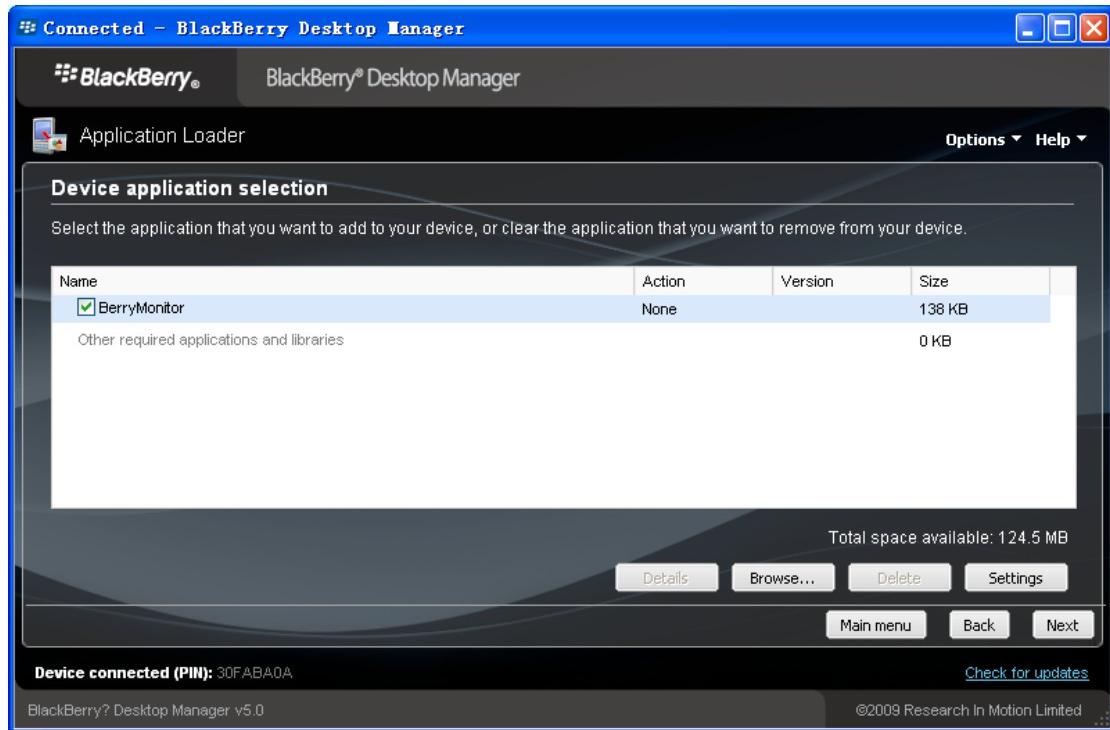
1. Install the Blackberry desktop manager on the computer;
2. Connect the handheld to computer using the USB port;
3. Open the Blackberry desktop manager;
4. Select the [Application Loader] item in the main menu;



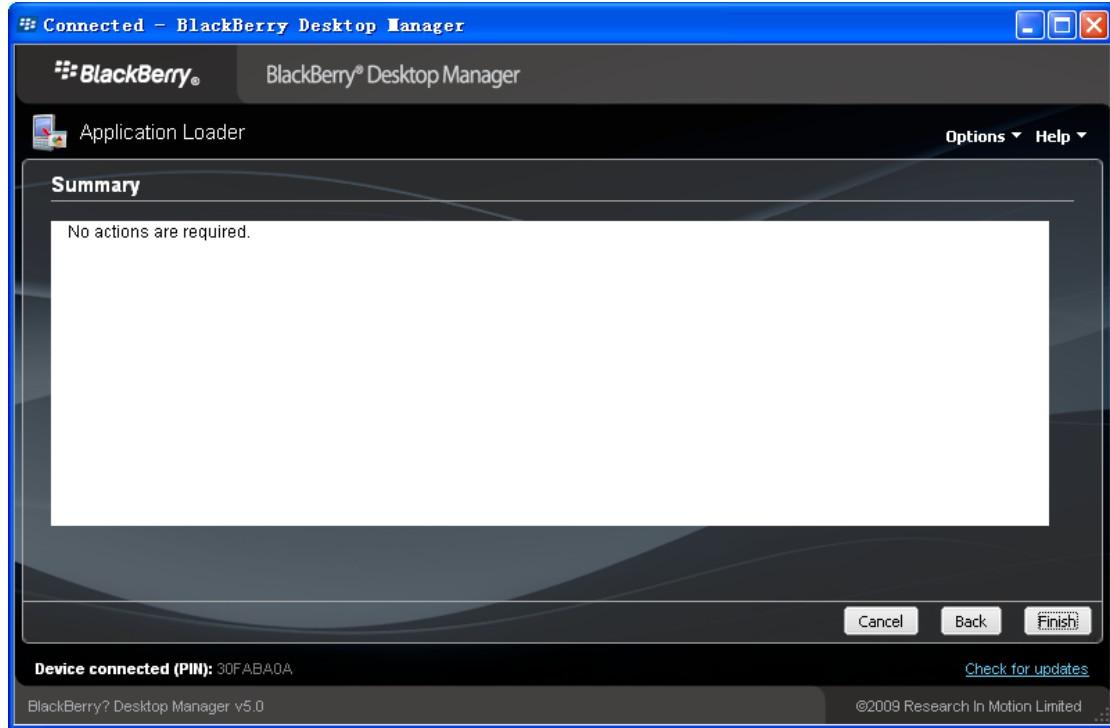
5. Click the start button on the [Add / Remove Application] side;



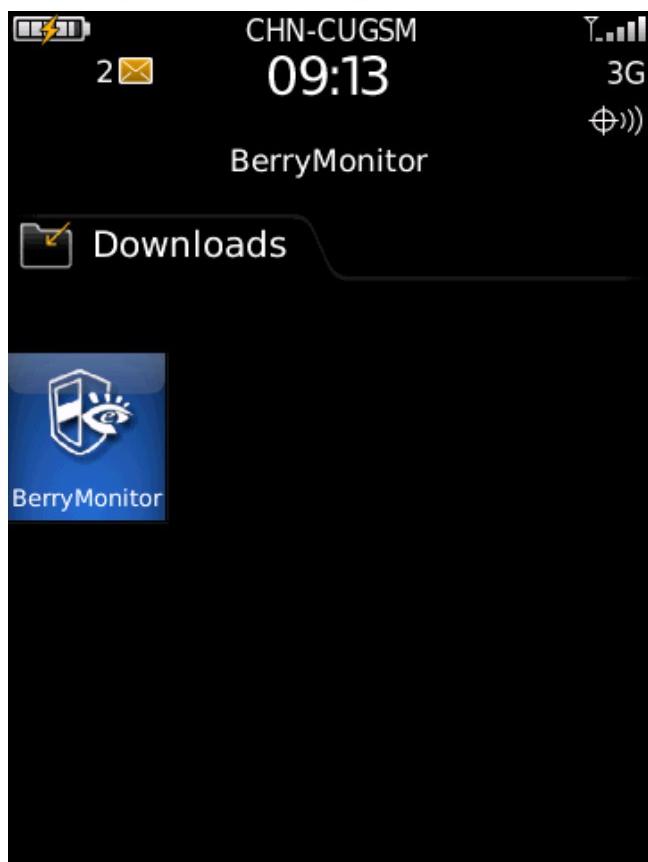
6. Browse and open the [\*.alx] file then click [Next];



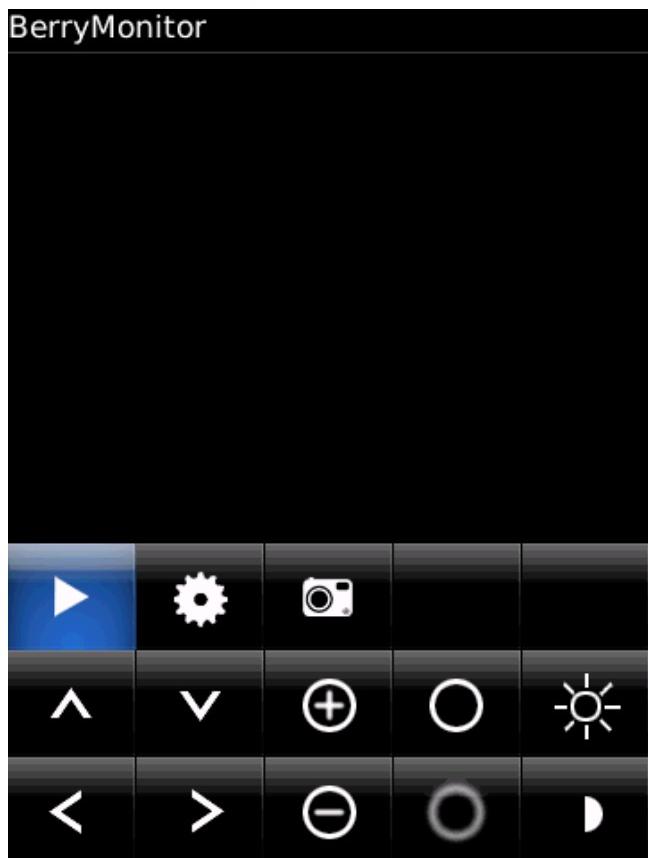
7. Just click the [Finish] button to complete the installation.



The startup shortcuts are usually located in the Downloads directory.



Main screen of the application.

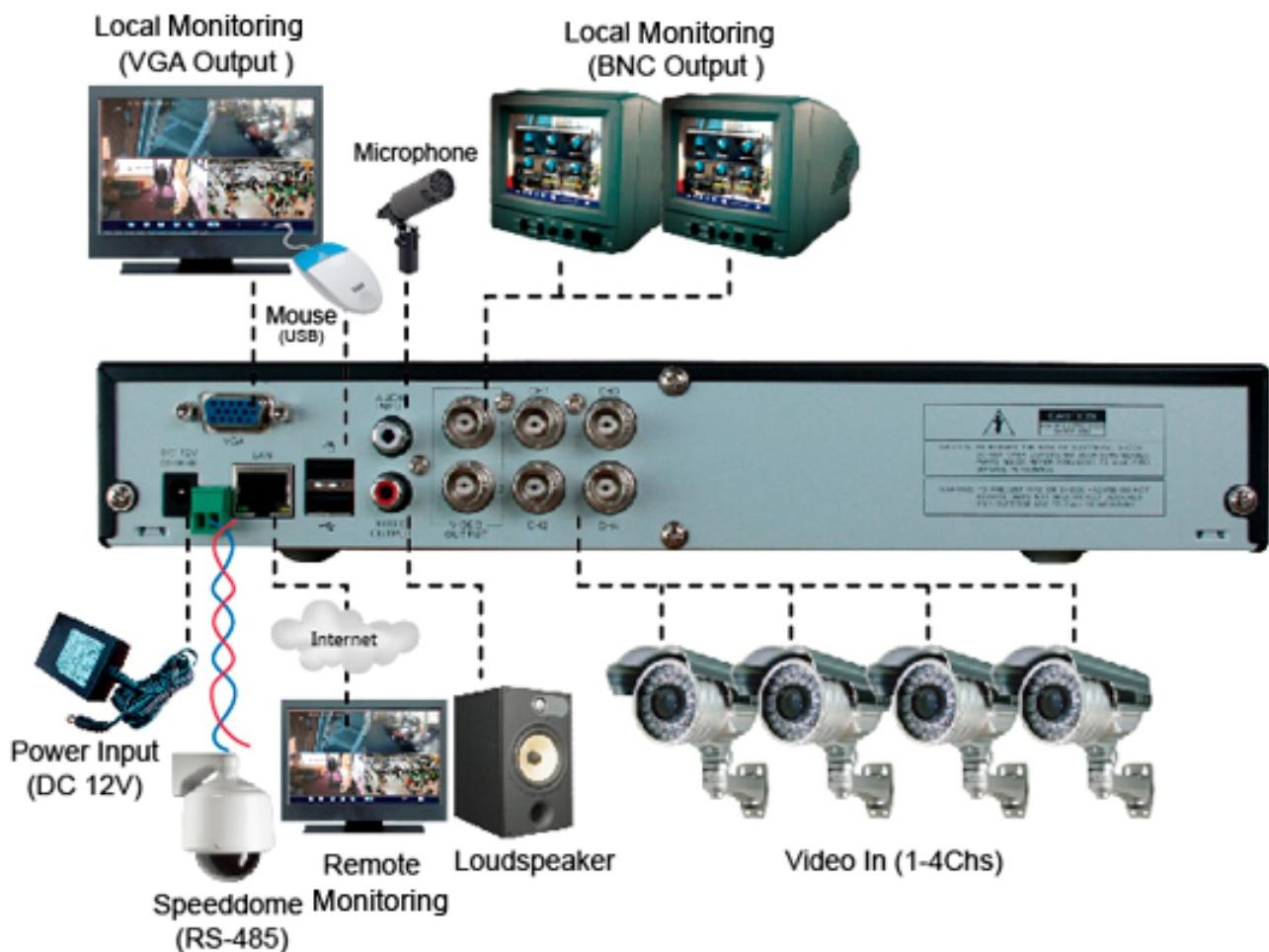


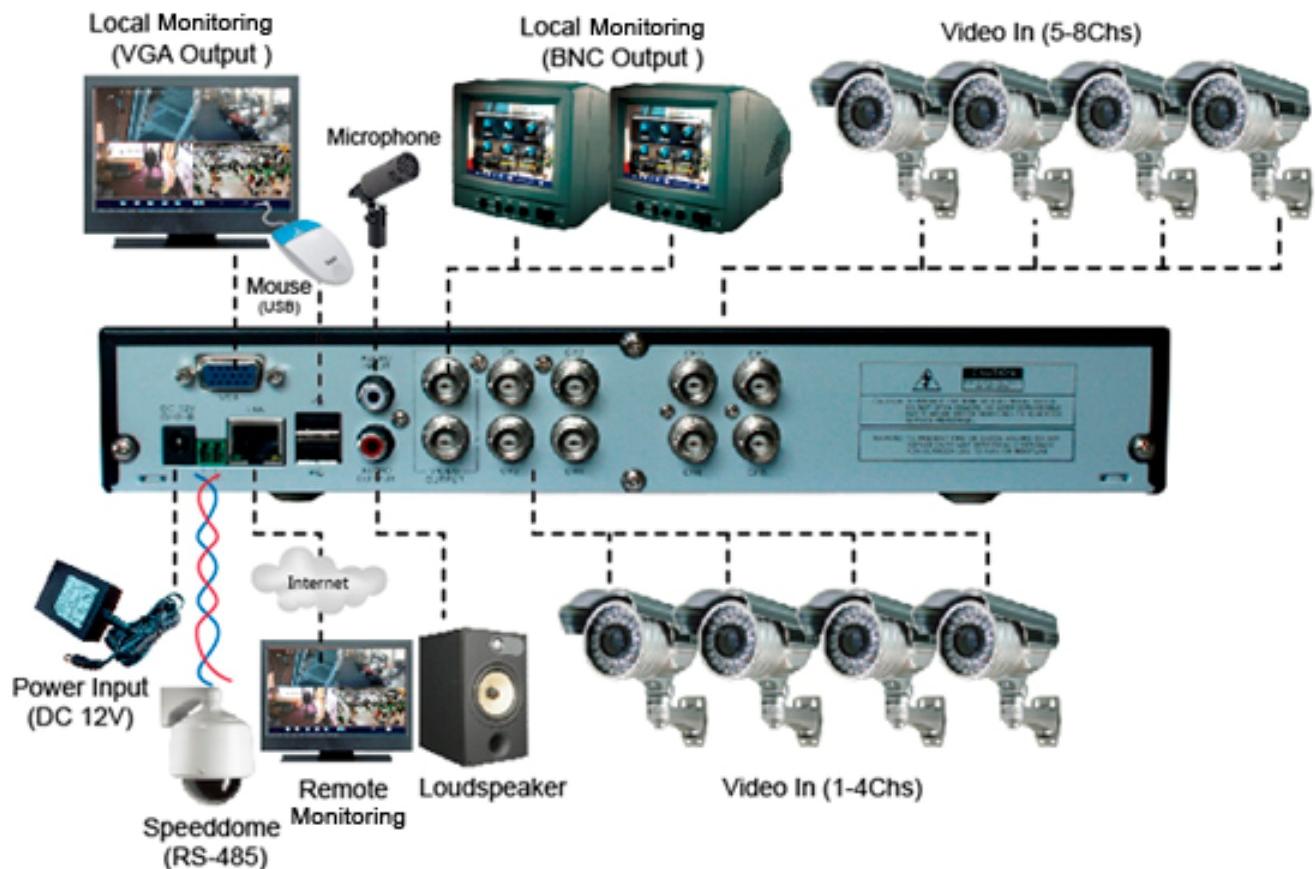
## Chapter 7. Specifications

Model	KG-SHA104 ( 4CH )	KG-SHA108 ( 8CH )
<b>Video Compression</b>	H.264	
<b>Video System</b>	NTSC / PAL	
<b>Operation System</b>	Linux	
<b>Video Input / Output</b>	BNC 4-channel / VGA 1-channel & BNC 2-channel	BNC 8-channel / VGA 1-channel & BNC 2-channel
<b>Audio Input / Output</b>	RCA 1-channel / 1-channel	
<b>Audio Compression</b>	8kHz*16bit ADPCM	
<b>Display Frame Rate</b>	PAL: 100 fps / NTSC: 120 fps	PAL: 200fps / NTSC: 240fps
<b>Playback Resolution</b>	PAL: CIF(352x288), HD1(704x288), D1(704x576) NTSC: CIF(352x240), HD1(704x240), D1(704x480)	PAL: CIF(352x288) NTSC: CIF(352x240)
<b>Recording Frame Rate</b>	PAL: 25fps@D1, 50fps@HD1, 100fps@CIF NTSC: 30fps@D1, 60fps@HD1, 120fps@CIF	PAL: 200fps@CIF NTSC: 240fps@CIF
<b>Recording Mode</b>	Always / schedule (motion detection/manual)	
<b>Recording Pack Time</b>	15/30/45/60mins file time selectable	
<b>HDD Interface</b>	One fixed HDD rack, supports up to 2TB SATA HDD	
<b>Network Interface</b>	RJ45, 10M/100M	
<b>Network Protocol</b>	Support TCP/IP, DHCP, DDNS, PPPoE	
<b>Network Function</b>	Support to live view with IE (Internet Explorer) & with mobile phone	
<b>USB2.0</b>	USB mouse, USB disk (backup, upgrade)	
<b>Playback</b>	Local: Playback 4 channels at the same time network: 1-channel	Local & network: Playback 1 channel @ CIF at the same time
<b>Playback Search</b>	Date/ time, file list	
<b>Playback Mode</b>	PLAY / SLOW / FWD / Frame by frame	
<b>Backup</b>	Backup via USB flash disk, USB HDD disk, USB CD/DVD-RW & Network	
<b>PTZ Control</b>	Built-in RS485, support PELCO-P & PELCO-D	
<b>Alarm Mode</b>	Motion Detection, video loss, HDD loss, HDD full, Email	
<b>Power Supply</b>	DC 12V/3A (power adaptor included)	
<b>Power consumption</b>	10-15 W (exclude HDD)	
<b>Working Temperature</b>	50°F to 104°F (10°C to 40°C)	
<b>Dimension</b>	300*224*55mm (WxDxH)	
<b>Weight</b>	Approximate 2.85kg	Approximate 2.9kg

## Chapter 8. System connection Configuration

### 4Channel DVR



**8Channel DVR****8 Channel DVR**

## Chapter 9. Appendix

### 9.1 Operation Function Table

Type	Title	Description	Page
Principle Setting	Time setting	Setting system date, time and format and day-light saving time setting	20
	Language Select	Setting system language	22
	CH Setting	Setting CH title and position; adjusting image color parameter value; setting CH display to ON / Off and time display/recording time overlaying to On/Off.	11
	Rec. Setting	Setting image quality, resolution, volume, recording mode and pack time	13
	Rec. Search	Time based search, channel based search and rec. mode based search.	15
	Rec. Playback	Specified time playback, scheduled playback, file list playback	15
	Playback mode	Play, play frame by frame, multi-speed forward and multi-speed rewind	15
	File backup	USB flash disk and removable HDD backup	15
	HDD Manage	Check HDD status, usage space, setting HDD auto-overwrite	16
Advanced Setting	Video Setting	Adjust VGA resolution, select video system	22
	User password	Setting or modifying user password	21
	Alarm setting	Setting HDD lost, HDD space, video loss, alarm management and Email alarm	17
	Motion detection	Setting on/off status of MD; select sensitivity and setting motion detection area.	19
	PTZ control	Selecting CH and setting PTZ protocol, baud rate and PTZ address for the CH	19
	Mobile Monitor	Setting user name, password and server port.	31
	System Maintenance	Setting system auto maintenance, maintenance time regularly, system upgrade, ex-factory default value recovery and manual restart system	22
Network Setting	Network and Port setting	Selecting network mode and setting net-viewer port, web port, DNS and DDNS parameters.	23
Network Function	Live display	Real time video input remotely	25
	Remote playback	Check local recording history via network	28
	PTZ control	Remotely control PTZ camera, position, focus, zoom and iris etc.	29
	parameter set of DVR remotely	Setting local CH display, recording, alarm, PTZ control parameter value via network	28
	Network download	Backup recording file via network	29
Auxiliary function	System info	Check device model, software version and MAC address	22
	( )	In addition to illustrating picture, Parenthesis generally indicate optional parameter value of previous menu.	
Menu button	Confirm	The button allows you save the modification of parameter value.	
	Recover default	The button allows you recover default value of current menu or system	
	Exit	The button allows you exit the current menu.	
	Next	On multi-channel mode, the button allows you check or modify other channel's parameter; on [File list] mode, the button allows you display next page.	

## 9.2. Recording Alarm setting

Please refer the below matrix: “ $\perp$ ” stand for “only alarm but no recording”; “AMR” stand for “alarm recording”; “NLR” stand for “normal recording”; and “NOR” stand for “no recording”. Once alarm is triggered, alarm icon will occur, and when many alarms are triggered, alarm remarks will occur on the screen.

Recording alarm setting		Alarm icon	Recording Mode				Manuel Recording
			Recording after power on	Timing recording			
Alarm mode	MD alarm	M		AMR	AMR	NLR	NLR
	HDD loss, HDD space full	H	$\perp$	$\perp$	$\perp$	$\perp$	$\perp$
	Video Loss	Video Loss	$\perp$	$\perp$	$\perp$	$\perp$	$\perp$

List 9-2

When DVR is in recording mode, [R] icon or [M] icon will appear on the screen. But when there is [M] icons on the screen it indicates a motion alarm was triggered. When [H] icon appears on the screen, that mean a hard drive alarm has occurred.

## 9.3. Troubleshooting

1. Q: What can I do if the system does not detect the HDD?

A: Check the data and power cables and make sure they are securely connected.

2. Q: We have changed the password but do not remember the new password, how can we access the system?

A: If you forget system password, enter 0800808 into the password field to reset the password

3. Q: We are not getting any video signal on the DVR, what is wrong?

A: Check to make sure the cables are securely connected to the BNC ports on the DVR. You can also try another cable to make sure there is not a problem with the cable. Make sure you have selected the correct video format for your country (NTSC or PAL), is the USA we use NTSC.

4. Q: Can the DVR have problems if it gets too hot, how can I prevent this?

A: The DVR has a fan to help it dissipate heat while it is working. Please place the DVR in a place where there is good air circulation and away from high temperatures to increase stability and life of the DVR.

5. Q: My remote control does not work when the DVR is in Live mode but the front panel buttons are working, what is wrong?

A: Make sure nothing is blocking the LED on the remote or the receiver on the DVR, if both are ok, check the batteries.

6. Q: Can I use the hard drive from my PC in the DVR?

A: You can if the hard drive is the same type and the size is supported by the DVR. If you install it in the DVR it will be formatted for use in the DVR and the PC will not be able to read it.

7. Q: Do I have to stop recording to playback files on the DVR?

A: No you do not have to stop recording, the DVR will support both functions at the same time.

8. Q: Can I erase files from the hard drive of the DVR?

A: You can not erase individual file, you would need to format the hard drive which will erase all of the files

9. Q: Why can't I log-in to the Net-viewer program?

A: Please verify that the Net mode is correct, the cable to the RJ-45 port is well connected to the DVR and the router, and that you are using the correct password.

10. Q: We have attached a PTZ camera but can not control it, what is wrong?

A: Verify that the Protocol, baud rate, address, and other settings on the PTZ camera match the settings you have put into the DVR. Make sure the data cables are attached firmly to the RS485 port on the DVR.

11. Q: Why does the Buzzer keep sounding?

A: Please check to see if motion detection is on and the system has detected motion, make sure the hard drive is being detected and has sufficient space available and that none of your cameras have lost video. You can turn off the buzzer in the Alarm setup option.

## 9.4. Email server check list (The below info only for your ref.)

(Web site)	Email address	Sender server (25)	Receiver server (110)
<a href="http://www.yahoo.com">www.yahoo.com</a>	@yahoo.com.tw	smtp.mail.yahoo.com.tw	pop.mail.yahoo.com.tw
	@yahoo.com	smtp.mail.yahoo.com	pop.mail.yahoo.com
<a href="http://www.google.com">www.google.com</a>	@gmail.com	smtp.gmail.com(465/587)	pop.gmail.com(995)

List 9-3

## 9.5. Usage Maintenance

1. Please make sure DVR keep away from heating source.
2. Clean the internal dust regularly, keep DVR aeration well and be easy to heat dissipate.
3. Please not plug in RS-232 and RS-485 when power is on to avoid any damage to the port.
4. Please check the HDD cable and data cable to avoid the cable aging.
5. Please avoid other electronics device interfere video/audio signal of DVR a.s.a.p., or static electricity and induced voltage damage to DVR.
6. Suggest user replace BNC cable regularly to keep signal input stable.

## 9.6. USB Device Support List

U2.0 USB Device Support Suggestion	
Brand	Capacity
<b>Netac</b>	1G
	2G
<b>Sandisk</b>	2G
<b>Kingston</b>	2G
	4G
	8G
	16G
	4G
<b>Kingston(DT Mini Slim)</b>	4G
<b>Newsmy</b>	1G
	2G
<b>Transend</b>	1G
<b>Kingmax</b>	2G
	8G
<b>DekTec</b>	1G
<b>Apacer</b>	8G
<b>PNY</b>	1G
<b>SSK</b>	1G
	2G
<b>TELECT</b>	4G
	16G
<b>UNIS</b>	1G
	4G

## 9.7. HDD Device Support List

SHA Series – SATA HDD Support Suggestion			
Brand	Capacity	Model No.	Note
Seagate	80G	ST380815AS	
	160G	ST3160815SV	
	250G	ST3250310SV	
		ST3250410AS	
		ST3250312CS	
		ST3250310SV	
	320G	ST3320410SV	
	500G	ST3500312CS	
		ST3500320AS	
		ST3500320SV	Special design for Standalone DVR.
		ST3500320NS	
		ST3500410SV	Special design for Standalone DVR.
	750G	ST3750330SV	
	1T	ST31000322CS	
	1T	ST31000340NS	Special design for Standalone DVR.
	1.5T	ST31500341AS	
WD	80G	WD800BD-08MRA1	
	160G	WD1600AAJS	
	250G	WD2500AVJS	Special design for Standalone DVR.
		WD2501ABYS	
	320G	WD3200AJJS	
		WD3200AVVS	
		WD3200AVJS	Special design for Standalone DVR.
		WD3200AAJS	
	500G	WD5000AVVS	
		WD5000AAKS	
	1T	WD10EVDS	
		WD10EVVS	
		WD1001FALS	
	2T	WD200FYPS	
Maxtor	80G	STM380211AS	
	320G	STN380215AS	
	160G	HDS721616PLA380	
	250G	HDP725025GLA380	
	320G	HDT725032VLA360	
Hitachi	500G	HDP725050GLA360	
	750G	HDS721075KLA330	
	1T	HDE721010SLA330	
	Samsung	80G	HD080HJ

	<b>160G</b>	HD161HJ	
	<b>500G</b>	HD501IJ/CNG	

## 9.8. 3G Cell Phone Support List

3G Cell phone Support Suggestion		
Brand	Model No.	Note
<b>Nokia</b>	N70	
	N73	
	N95	
	E65	
<b>Motorola</b>	V3x	
	E770	
<b>Sony Ericsson</b>	SE K600i	
	SE k700i	
	SE 700i	
	SE 800i	
	Z610i	
<b>Samsung</b>	SGH 400	
<b>HTC</b>	TyTNII	PDA Phone
	CHT9000	
<b>Apple</b>	iPhone	
<b>Blackberry</b>	9000	
	9530	
	9630	

The material in this document is the intellectual property of our department.

No part of this manual may be reproduced, copied, translated, transmitted, or published in any form or by any means without our department prior written permission.

Our products are under continual improvement and we reserve the right to make changes without notice. But no guarantee is given as to the correctness of its contents.

We do not undertake any responsibility for the harms cause by using our product.

The model of the products in the user's manual only for recognition, but these names also perhaps are belong to other company's registered trademark or the copyright.

The product picture may differ from the actual product, only for your reference. The accessories will probably be different according to the different selling areas. For details of accessories, please refer to your local distributor.

**Copyright reserved**